Public Utilities

FORTNIGHTLY

Volume XLVI No. 2 July 20, 1950

AMERICAN ENTERPRISE PROVES UP ITS STRENGTH

By Robert R. Gros

« »

Engineers Blast Federal Power Policy

By F. F. Page

« »

An Answer to the Inflation Dilemma in Rate Making
Part II.

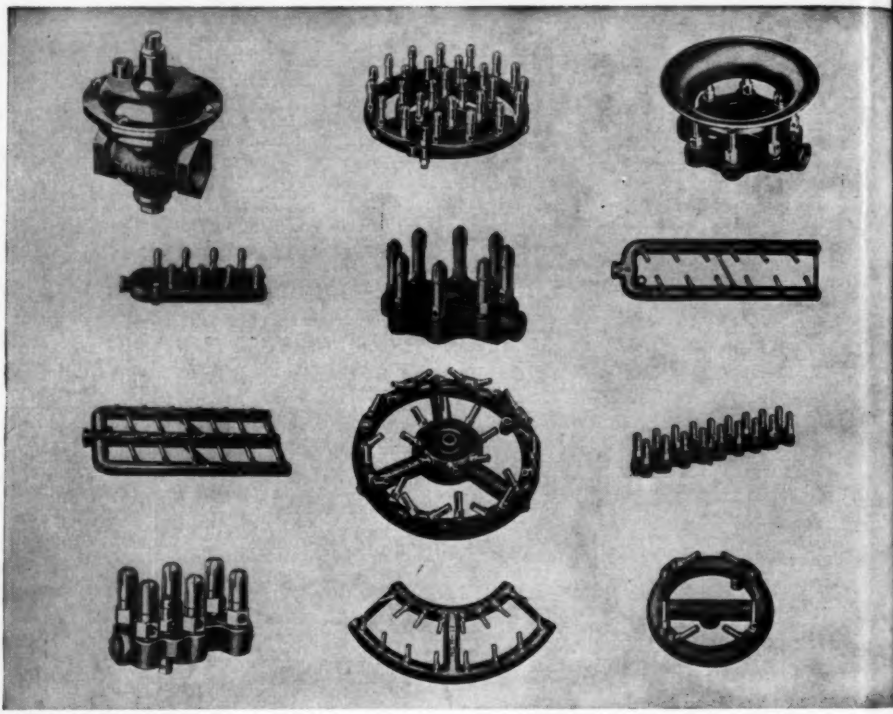
By John W. Kushing and Grover C. Wirick, Jr.

« »

A College Student Looks at Rural Electrification

By Clark M. Brink

PUBLIC UTILITIES REPORTS, INC., PUBLISHERS



Editor • Ellsworth Nichols
Managing Editor • Francis X. Welch
Associate Editors • Neil H. Duffy
Donald E. Robinson
Franklin J. Tobey, Jr.
Donald T. Burke
McLellan Smith
Financial Editor • Owen Ely
Assistant Editors • M. C. McCarthy
M. L. Williams

Henry C. Spurr
Editorial Consultant

Public Utilities

FORTNIGHTLY

Volume XLVI JULY 20, 1950 Number 2

Articles

Feature Sections

Public Utilities Fortnightly . . stands for Federal and state regulation of both privately owned and operated utilities and publicly owned and operated utilities, on a fair and nondiscriminatory basis; for nondiscriminatory administration of laws; for equitable and nondiscriminatory taxation; and, in general—for the perpetuation of the free enterprise system. It is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

$1.00 a Copy
26 Issues a Year
Annual Subscription Price $15.00

Public Utilities Reports, Inc., Publishers

Publication Office........ Candler Bldg., Baltimore 2, Md.
Executive, Editorial, and Advertising Offices.. Munsey Bldg., Washington 4, D. C.

Entered as second-class matter April 29, 1915, under the Act of March 3, 1879, at the Post Office at Baltimore, Md., Dec. 31, 1936.

Address all communications concerning the Fortnightly *to the publishers at Munsey Building, Washington 4, D. C.*

"Utilities" that cut costs in every department

Every system, every machine on these pages *is* cutting costs right now in the offices of many public utilities. We know what the public utilities need—since for over fifty years we have been supplying those needs. The quickest, easiest way for you to utilize this fund of cost-cutting experience is to send for the free booklets listed here which interest you most—all of them if you like.

Pages with the Editors

WITHOUT doubt the most important development at the recent eighteenth annual convention of the Edison Electric Institute at Atlantic City was the adoption of the so-called 15-point document entitled "Principles for Sound Water Resources Development." It marked a clear-cut restatement of the industry's position on certain controversial aspects of Federal power policy which have so long been bedeviled with politics and misunderstanding.

BASICALLY, the institute's policy statement was neither new nor startling. The Edison Electric Institute has previously taken a pretty clear position in favor of more participation of private industry in the hydroelectric phases of Federal multipurpose projects. The institute has also stated its position on the elimination of tax exemption, subsidies, and other preferences for public agencies.

BUT observers were quick to see the clear-cut distinction which the Edison Electric Institute made between Federal and "non-Federal" participation in water resources development. The issue was no longer simply a matter of public *versus* private interest. There was a plain implication that the states, municipalities, and other agencies ought to have a greater part as well as greater responsibility in the marketing and distribution of local power supply.

ROBERT R. GROS

F. F. PAGE

THE immediate cause of this restatement of the private power industry's position on public projects provides an interesting commentary. Several weeks ago a general invitation for qualified views on water resources development was issued by President Truman's Water Resources Policy Commission, headed by Morris Llewellyn Cooke. It was in response to this invitation that not only the EEI but also the National Association of Electric Companies submitted to the WRPC the composite views of its membership on proper utilization of the nation's water resources. Because of unexpected delays, an article by the head of one of these associations, which we had promised to present in this issue (dealing with the industry's position on resources development), has had to be postponed for several weeks. But we are able to bring our readers an article about another response to the WRPC.

THE Engineers Joint Council, headed by Abel Wolman, represents five major

branches of the engineering profession. These include the civil, electrical, mechanical, chemical, and metallurgical engineers and thus speak in a representative capacity for the nation's 100,000 practicing members of the engineering profession in the United States. The article beginning on page 76 of this issue contains an enlightening review of the position taken by the Engineers Joint Council in its reply to WMPC.

F. F. PAGE, author of this review of the Engineers Joint Council report, has been writing about public works projects for nearly a decade. He was editor and cofounder of a regional highway, airport, and construction publication in Minneapolis which was widely circulated in the upper Missouri valley. He was aviation editor for the *St. Paul Dispatch* and *Pioneer Press* for more than two years and came to Washington in 1946 as director of public relations for the National Aeronautic Association. He is now assistant director of public relations for the American Road Builders' Association.

* * * *

IN this issue we conclude the 2-part series, entitled "An Answer to the Inflation Dilemma in Rate Making," which began in the July 6th issue. The joint authors are JOHN W. KUSHING, chief engineer and director of public utilities of the Michigan Public Service Commission, and GROVER C. WIRICK, JR., of the research and valuation committee of the same commission. In the concluding instalment they outline a practical plan for coping with the fluctuating and imponderable factors which must be considered in fixing utility rates during a prolonged period of rising prices.

JOHN W. KUSHING

* * * *

A NEW contributor to these pages is ROBERT R. GROS, whose article entitled "American Enterprise Proves up Its Strength" begins on page 69. He is a graduate of Stanford University, '35 (Phi Beta Kappa), who also had some brief experience in teaching with the Stanford faculty. In 1937 GROS joined the publicity staff of Pacific Gas and Electric Company. Since 1944 he has been manager of that company's publicity and advertising department. He assumed this job as executive for one of the largest advertisers in the western part of the country when he was just twenty-nine—to become the youngest department head in the history of that organization. For some years MR. GROS has averaged over 100 addresses annually for highly diversified audiences.

* * * *

IN this issue we indulge in a rather unusual editorial treatment by presenting a college boy's views to a rather sophisticated readership, composed of regulatory officials, industry executives, members of the learned professions, and others who make up our FORTNIGHTLY subscribers. But we feel justified in publishing this interesting case study of what a typical college boy thinks about these days when his teacher tells him to write a term paper on the Federal rural power policy. Our author, CLARK M. BRINK (whose article begins on page 92), is a sophomore in Dartmouth College and a former page in the United States Senate. He attended Phillips Academy in Andover, Massachusetts, and resides in Arlington, Virginia.

THE next number of this magazine will be out August 3rd.

The Editors

Coming IN THE NEXT ISSUE

★

THE POWER PICTURE IN WESTERN EUROPE

Electric utility companies in the United States have been coöperating for more than a year in a program of peaceful public service on an international level. John P. Callahan, of the staff of **The New York Times,** gives us a description of the work being done by Europe's leading engineers, studying American methods under the tutelage of utility organizations in this country.

A BANKER LOOKS AT CHANGING ECONOMIC TRENDS

A banker speaks on the responsibility and opportunity of the banking fraternity to offset a dangerous trend in Federal spending which is undermining the enterprise system on which American banking is necessarily based. Walter R. Williams, Jr., treasurer of the Union Dime Savings Bank, has taken a broad view of what the bankers themselves have to do even at the local community level to ward off the dangers of "back road" Socialism.

AMERICA'S BIG WAR FOR WATER

Various public utilities, including water, irrigation, and hydroelectric companies, are concerned with the problem of diminishing or polluted water supply, especially in areas of rapidly increasing population. Looking far into the future—or maybe not so far at that—Robert M. Hyatt, professional writer in California, brings us news of developments among the "rain-makers" and sea-going distillers.

IS THE DEMAND CHARGE PROMOTIONAL?

Alfred V. Roberts, until recently a regulatory commission official of many years' experience, has written a critique of the electric demand charge from the standpoint of sound rate promotion. In a previous article, Mr. Roberts had developed the proposition that the demand charge might be discriminatory against certain industrial consumers, especially of the seasonal type. His conclusion, although quite debatable among regulatory experts, is a thought-provoking argument in favor of dropping the demand charge.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***

Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

WALTER S. HALLANAN
Chairman, National Petroleum Council.

"American corporations have grown big because there were big jobs to be done."

WILLIAM C. HENRY
President and general manager, Northern Ohio Telephone Company.

" . . . inflation is a political coward's approach to our present economic problems."

THOMAS W. PHELPS
Broker, Francis I. DuPont & Company.

"Freedom is indivisible, as even a monkey with only 25 per cent of his paws in a trap well knows."

JOHN W. ANDERSON
President, Andrews-Anderson Company.

"A citizenry without individual incentive to labor diligently for honest personal profit is doomed."

SAMUEL PLATT
Reno lawyer.

"American leadership, straining today to plant the crop of Socialism, is feeding the gluttonous maws of Communism."

WILLIAM A. MARCUS
Senior vice president, American Trust Company.

"Perhaps in no other field of lending has the country been sucked further into the welfare state than in home financing."

FRANK W. ABRAMS
Chairman of board, Standard Oil Company (New Jersey).

"Our society owes its material achievements to a belief in the integrity, importance, and responsibilities of the individual."

NORMAN THOMAS
Socialist.

"[The President's proposal for supplementing a private steel industry with some sort of government plant was] neither good Socialism nor good Capitalism nor good sense."

P. W. JOHNSTON
President, Erie Railroad.

"Thrift is an old-fashioned virtue, but in spite of all present-day promises of Utopia, or getting something for nothing, no worth-while substitute for thrift has been found."

ALFRED DRISCOLL
Governor of New Jersey.

"Since big government feeds on crisis, the citizens of tomorrow will seek by better planning and a greater participation in politics and in government to avoid domestic as well as international crisis."

J. EDGAR HOOVER
Director, Federal Bureau of Investigation.

"The FBI has less than 170 telephone taps in existence, confined to internal security cases, throughout the entire United States and its possessions."

EXCERPT
Excerpt from Industrial News Review.

"Some observers think that the real philosophy of the (Great Atlantic & Pacific Tea Company) suit lies in an attempt to destroy 'bigness' just because it is big. If that is true, it is an effort to hitch the American economy to an ox cart."

W. WALTER WILLIAMS
Chairman, board of trustees, Committee for Economic Development.

"The more goods our labor force can produce, the more will be available for all our people. Real economic growth is measured not in terms of dollars but in terms of output per man-hour. Only if we produce more can our living standards really rise."

HAROLD G. MOULTON
President, The Brookings Institution.

"The only economic system sufficiently dynamic in character to assure us of enjoying a century of great abundance is free enterprise. . . . It is the only system with the driving force capable of helping this still blessed land realize its great potentialities."

HENRY R. LUCE
Publisher, Fortune Magazine.

"We must give up the illusion—both comfortable and inane—that Soviet Communism is something to be contended with by food baskets from Lady Bountiful. Far though we are from its brutality, we must learn to see Soviet Communism as the modern barbarian."

ALBEN W. BARKLEY
Vice President of the United States.

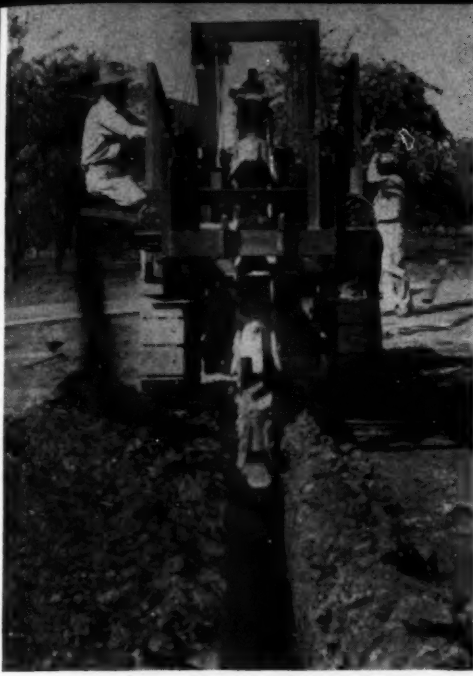
"The complexity of our lives, due to the multiple inventions of our people that have changed the modes and conventions of our lives and thinking, has made it necessary for the government to take cognizance of and participate in many activities that a half-century or a century ago were not necessary."

SOESILO SARDADI
Visiting Indonesian student.

"American life is so complex. When I first looked on a floor I saw a carpet, which makes you need a vacuum cleaner, and for this you need electricity, and for this you need a hydro, and for this you need the TVA, and for this you need capital, and part of this capital comes from taxes, but you do not like to pay taxes."

BENJAMIN F. FAIRLESS
President, United States Steel Corporation.

"Whether you call it the Square Deal, the Fair Deal, the New Deal, or just plain Federal regulation, the fact remains that once the dead hand of politics gets its convulsive grip on American business and industry, free competition will be strangled and our economic system will be no different—and no more successful—than those noble experiments which are crumbling into dust in Europe."




CLEVELAND

"operation" SUB-ZERO

The Foster Wheeler Outdoor Steam Generator illustrated here is designed to operate under severe climatic conditions at an elevation of 3100 feet. The plant is being engineered and constructed by Ebasco Services Incorporated for the Montana Power Company at Billings, Montana and will supplement the company's present hydro system, providing additional capacity, to take care of load growth.

An enclosed firing aisle is provided and the space under the firing aisle and furnace floor is housed to afford storage and shop space. The drum ends are enclosed so as to house the water columns, gage glasses, safety valves, etc. Small piping for such items as instruments, controls, drains, is enclosed within ducts terminating in the drum end enclosures, with the ducts being heated during freezing weather.

Plant site on the banks of the Yellowstone River

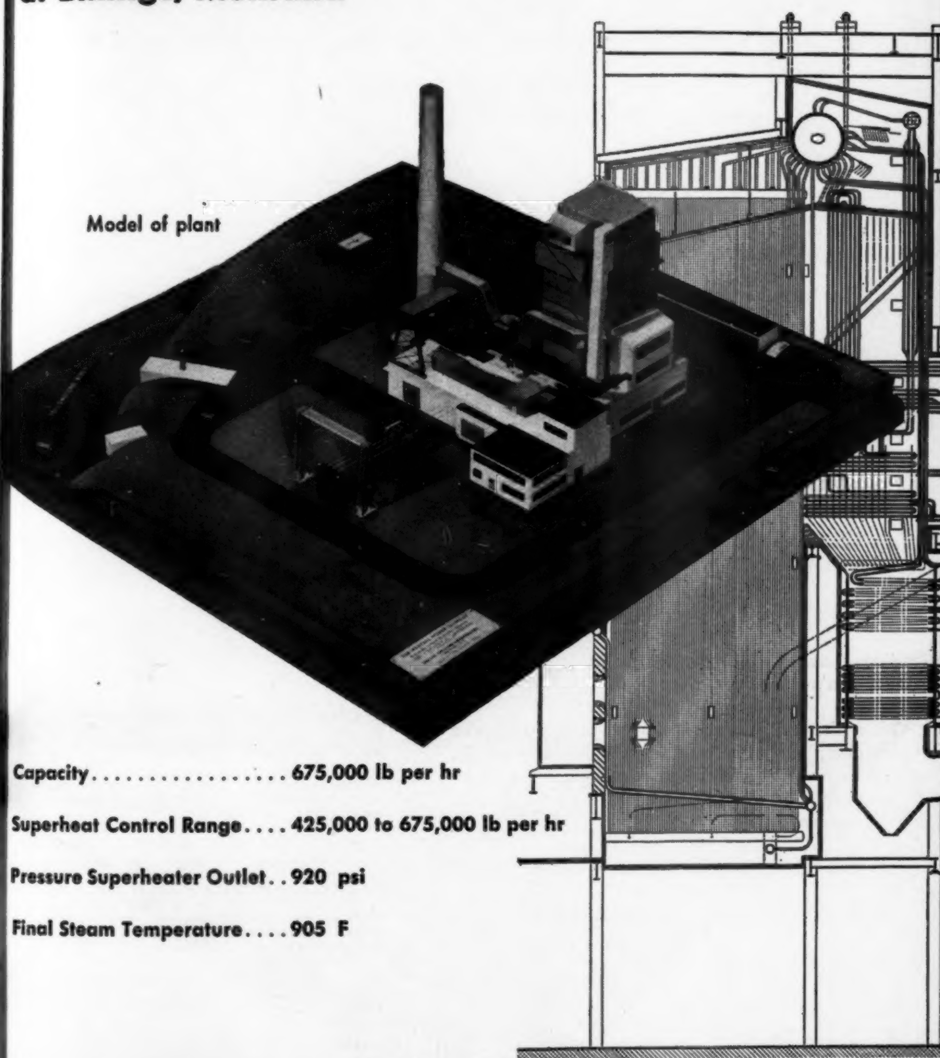
FOSTER WHEELER CORPORATION

FOS
Out
MO
at B

Capa
Super
Pressu
Final

BRO

FOSTER WHEELER
Outdoor Unit for the
MONTANA POWER COMPANY
at Billings, Montana



Model of plant

Capacity . . . . 675,000 lb per hr

Superheat Control Range . . . . 425,000 to 675,000 lb per hr

Pressure Superheater Outlet . . 920 psi

Final Steam Temperature . . . . 905 F

BROADWAY, NEW YORK 6, N. Y.

FOSTER WHEELER

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

Utilities Almanack

July

20	Th	¶ *American Federation of Radio Artists will hold annual convention, Chicago, Ill., Aug. 10–13, 1950.*
21	F	¶ *Pennsylvania Water Works Operators' Association will hold annual conference, State College, Pa., Aug. 21–23, 1950.*
22	Sa	¶ *Illuminating Engineering Society will hold national technical conference, Pasadena, Cal., Aug. 21–25, 1950.*
23	S	¶ *Annual Appalachian Gas Measurement Short Course will be held, Morgantown, W. Va., Aug. 30–Sept. 1, 1950.*
24	M	¶ *Western Association of Broadcasters and Canadian Association of Broadcasters will hold meeting, Jasper, Alberta, Canada, Aug. 30–Sept. 2, 1950.*
25	Tu	¶ *American Water Works Association, Minnesota Section, will hold annual meeting, St. Paul, Minn., Sept. 6–8, 1950.*
26	W	¶ *New Jersey Gas Association will hold annual meeting, Spring Lake, N. J., Sept. 8, 1950.*
27	Th	¶ *Michigan Independent Telephone Association will hold annual convention, Lansing, Mich., Sept. 14, 15, 1950.*
28	F	¶ *Mid-West Gas Association will hold gas school and conference, Ames, Iowa, Sept. 14, 15, 1950.*
29	Sa	¶ *National Butane-Propane Association will hold meeting, Chicago, Ill., Sept. 18, 19, 1950.*
30	S	¶ *American Gas Association will hold accident prevention conference, Washington, D. C., Sept. 18–20, 1950.*
31	M	¶ *Pacific Coast Gas Association begins annual meeting, Seattle, Wash., 1950.*

August

1	Tu	¶ *American Water Works Association, Wisconsin Section, will hold annual meeting, Oshkosh, Wis., Sept. 19–21, 1950.*
2	W	¶ *Rocky Mountain Telephone Association will hold annual convention, Salt Lake City, Utah, Sept. 21, 22, 1950.*

Brand-new Keystone Plant

Sunbury, Pennsylvania, steam-electric station recently dedicated.

Courtesy, Pennsylvania Power & Light Company

Public Utilities
FORTNIGHTLY

VOL. XLVI, NO. 2 — JULY 20, 1950

American Enterprise Proves up Its Strength

The so-called Cold War is not only an international major conflict being waged at the diplomatic level, it also vitally affects our private enterprise system on the domestic front. This writer believes the Cold War actually has icicles all over American business. The threat to the utility industries is specifically explored.

BY ROBERT R. GROS*

AT a meeting a few years ago on the high seas of the North Atlantic, some American foreign policy was promulgated without the review and sanction of the U. S. Senate. At that shipboard table of state, FREEDOM was quartered. There emerged the stirring "Four Freedoms," which have since come to have a familiar and high-sounding ring. But isn't it a fact that the proverbial "bird in a gilded cage" has all four freedoms? He has freedom from want, through his daily care. He has freedom from fear in the security of his cage. He has freedom of speech—as much as he wants to warble of it. I presume he also has freedom of belief after his own fashion.

Yet this bird doesn't have life's most important freedom of all—freedom of individual initiative and ac-

*For personal note, see "Pages with the Editors."

tion, liberty itself. This is the real freedom that cannot be divided. You can't take that kind of freedom away from any individual and still call him a free man. It is a fight to the finish for this sort of freedom which is being fought on many fronts around the world, some of which I have been able to visit personally, observing various phases of the Cold War all the way from Berlin to Delhi, circumnavigating the globe in both directions.

Wherever one goes in today's world, he finds evidence of the Cold War—not just in the ancient capitals of Europe or Asia, but even in remote and relatively isolated islands in the western Pacific. It varies only in degree and intensity. Everywhere today, the agents of the bandits of the Politburo are hard at work. Unfortunately there is a complacent tendency among many American businessmen to look upon the Cold War as a foreign affairs problem—something removed from their day-to-day problems of building highways or homes, keeping customers happy, of meeting the payroll, and drawing their own salaries. Such a view dismisses some deep realities. The real fact is that the Cold War has icicles all over American business.

If we should lose the Cold War, if we should take a shellacking in any hot war eventuality, if we don't arm our business camp, if we sit back and wait for George to do it, our free enterprise system will collapse. In short, American business is up to its neck in this Cold War.

The "enemy" has powerful, and in many cases unwitting, allies in American indifference, in American tolerance, in men of influence who should know better, in some of our public servants who believe in political expediency above all else, in intellectual dupes of ideological false prophets, and in groups of good American citizens swayed by half-truths.

To meet this challenge American industry, including everyone who has a stake in it, as investor, management, employee, and consumer, has a mighty job to do, in his own self-interest. Notwithstanding its incomparable record of achievement for the public good, private enterprise is under attack today in this country as well as everywhere else in the world.

To bring this scrap home, we need only look at the power industry. For many years, the power systems of America have been fighting against the encroachments of government in business, against the advance of Statism upon the utilities. *No part* of our economic structure is immune from such attack. This fight of the utilities is the fight of all other businesses—steel, the railroads, and scores of other basic industries. After nationalized power, what would be next? Life insurance would be a natural—transportation—possibly merchandising—and already the medical profession finds itself threatened. There is no limit to the greed of bureaucracy!

In meeting their responsibilities, the utility industries are leaving no chinks in their armor. Critics have tried to make capital of the thin margin of reserve generating capacity left when the war ended. But they have been confounded by the tremendous expansion that has taken place since VJ-Day. Today the industry can "point

with pride" to the job that has been done by both the gas and electric utilities of America.

Of course, contributing factors must be acknowledged. Contracting organizations, for example, have shown an outstanding example of the traditional American business teamwork with which we all are familiar.

The growth in demand for utility service since the war in every section of the country has been beyond all precedent. It has far exceeded all expectations of a traditionally forward-looking industry. But the industry has taken such growth in stride. It has measured up to all demands upon it, as it traditionally has done throughout its existence.

Starting from VJ-Day with our resources strained by wartime growth and with wartime restrictions keeping us from building as we normally would have, the utilities in just five years have both met the enormous postwar growth and have restored reserves, in the case of electricity, to a point close to prewar standards of spare capacity. Gas utilities have pushed through a comparably great program of expansion. Here are a few figures to illustrate. They tell a story of private enterprise that needs to be shouted from the housetops to the confused people the party-line pinkos are conniving to lead down the deceptive road to economic and political slavery.

New capacity already installed or scheduled for installation from VJ-Day through the end of 1951 by the business-operated electric companies of America amounts to 28,000,000 horsepower. In just six years of building these companies will have increased by 52 per cent the capacity they had at the end of the war—a capacity that met all the tremendous demands imposed upon it by the war.

By the end of 1951 the electric utility companies will have invested more than $9 billion in postwar construction. They spent $2 billion in 1949, and construction in progress this year will require an equal sum. Every cent of that $9 billion is investment money. Nobody was taxed to raise it, and it goes into utility properties that are all on local tax rolls. It might be noted that my own company paid $4,598 in taxes every hour of every day last year. It isn't necessary for me to point out in this connection that government-owned utility properties are exempt from taxation.

To bring this expansion of the business-operated utility companies down to a concrete and typical example, I would like to cite the program of the Pacific Gas and Electric Company, with which naturally I am most familiar, although other companies

"In meeting their responsibilities, the utility industries are leaving no chinks in their armor. Critics have tried to make capital of the thin margin of reserve generating capacity left when the war ended. But they have been confounded by the tremendous expansion that has taken place since VJ-Day."

have fine records in other areas. The one respect in which our program is *not* completely typical is that it happens to be the *largest* building program of any single utility company in the world.

THE postwar growth of population and industry in the West, and particularly in California, has been phenomenal. The Pacific Company successfully met every demand upon it during the war but, like other utilities, it emerged with reserves of generating capacity reduced to a critically low level. Construction projects which were on the boards when war began, and which for the most part had to be suspended during the war, just were not adequate for the continued and extremely sharp rise in demand for electricity which set in immediately the guns stopped shooting.

We at once adjusted to the changed situation and went to work. Of course, we cannot build powerhouses overnight, but already our building program is showing immense results. Just last March, up on the Feather river, there was brought on the line for final and satisfactory tests, the seventh new powerhouse or major plant expansion on our system, all completed from drawing board to finished powerhouse since VJ-Day. The first unit of a giant 402,000-horsepower steam plant has been placed in service since then. It will be completed next spring, and another immense plant of identical capacity will follow it into service next summer.

And this company is not stopping there, for we already have preliminary work under way for additional hydroelectric developments planned to follow 1951. Up to this moment, we have added over a million horsepower of new capacity since the war ended. By the end of next year, the total increase in our system capacity will be 1,826,000 horsepower—an increase that practically doubles the capacity that was sufficient to meet all wartime needs. To date we already have expended on new gas and electric construction more than half a billion investor dollars—and we are just about two-thirds of the way through our present program.

EXAMPLES like this of themselves give assurance that private enterprise in this country is still very much alive and is confident of the future. Such facts refute any suggestion that our industry is unable or unwilling to undertake all that is needed to provide the utility service our economy requires. Release private enterprise from unfair tax-free government competition and bureaucratic hamstringing and we have no worry about whether it will measure up to its responsibilities.

Let's look next at the gas utility industry. To reverse the procedure by progressing from the particular to the general, let me start with PG&E's "Super Inch" natural gas transmission line, which was begun last summer and will be completed by the end of this year.

This line is 34 inches in diameter, the largest diameter line ever built for the high-pressure transmission of natural gas. Our section of the pipe is being manufactured completely in the West—in itself an example of the West's industrial growth. The plate steel comes from Geneva and is fabri-

Private Expansion No Burden to Taxpayers

"By the end of 1951 the electric utility companies will have invested more than $9 billion in postwar construction. They spent $2 billion in 1949, and construction in progress this year will require an equal sum. Every cent of that $9 billion is investment money. Nobody was taxed to raise it, and it goes into utility properties that are all on local tax rolls."

cated in south San Francisco. The line, being constructed jointly by the El Paso Natural Gas Company and PG&E, will be 1,600 miles long. Next year northern California will be supplied with Texas and New Mexico natural gas through this example of private enterprise at work.

This mighty project is just one of many examples that the business-operated utility industry of America is doing big things. It will be recalled that the self-styled "Old Curmudgeon" of the Interior Department once told us that his "Big Inch" pipeline was too big a job for private enterprise! Well "bigger" and "biggest" inches already have been constructed and here we are at work on a line so big that we had to "go Hollywood" and call ours "Super Inch."

When we consider such outstanding performance by the gas and electric utilities in serving the public, why is it that there is such insistent, insidious, determined effort to foist upon this country the creeping paralysis of Socialism? Yet, logical or not, it's there and we've got to face it. We in the utility industry have been facing it for nearly a generation. There are signs now that others are beginning to see the danger, and it is high time they did. The party liners have been emboldened by their successes.

Since the war they have dared to voice threats against the steel and oil industries as well. The medical profession is having to lay down its scalpels and take up the cudgels in a fight for its survival. We have only to look at the long list of industries the British Labor government has nationalized to see what's in store for us if we don't soon turn the tide. Banking, civil aviation, telephone, cable and wireless communication, coal mining, transportation, electricity, health services, national insurance, the gas industry—that's what have been nationalized so far in England.

Recently I was studying a map showing the location of all federally financed power projects built, building, or proposed through March, 1949. There was not a section of the country, from Maine to California, that was not covered with spots. This map shows 641 federally financed power plants—a sharp contrast with only 11 in 1933.

My company—and I cannot presume to discuss other utility companies in this connection—does not oppose the installation of hydroelectric generating facilities at flood-control and reclamation projects as an auxiliary feature for the purpose of helping repay the cost of the projects through sale of electric energy. But we do strenuously object to the use of taxpayers' money—ours included—to set the government up in a tax-free competitive commercial power operation, which is obviously the intent when tax funds are sought to build unnecessary transmission lines and steam plants to serve customers already supplied by business-operated utilities.

Businessmen in other competitive fields can appreciate this situation. They get their business only through sharp-pencil figuring of bids, improving methods, and investing big amounts of capital in equipment, labor, and so forth. They operate realistically because their problems are also their competitors' problems. Labor costs, equipment and materials costs, margins of profit are all on a par. It is a fair game where the same rules apply to all players.

Now let's see what government competition would do to a nonregulated industry—for instance, the general contracting business. What private contracting firm would like to bid on a $500,000 building or a $35,000,000 dam if some new "Federal Bureau of General Building" were also a bidder? Could the private company take the job if it arrived at a bid in the normal manner, then had to knock 20 per cent off? That is roughly what utility company taxes amount to—20 cents of every dollar of revenue; 20 cents of every dollar of every person's or firm's electric bill goes to taxes.

The Federal public power enthusiasts talk about "low-cost electric power." Private company rates compare favorably with government power rates, despite this 20 per cent tax differential. Adding insult to injury, so to speak, consider the fact that the industry pays millions of taxes to the Federal government which it uses in part to build the public power facilities to compete with the same private industry taxpayer! Let us assume, however, that our hypothetical contractor succeeds in confining the "Federal Bureau of General Building" to "public agency" jobs—that is the supposed purpose of the Bureau of Reclamation transmission lines. Could any private company expect construction business from schools, municipalities, counties, states, hospitals, irrigation districts, and other governmental subdivisions as long as those bodies can get the same building construction done for 20 per cent less?

Obviously, the rules of fair play vanish with government competition. The private construction company would be fighting out of its weight class—with a pair of 8-ounce gloves against an armed opponent.

Such is the comparable situation we in the electric industry have been facing for years. It's something similar to what the realtors are up against with Federal housing. It's what the insurance companies are up against with proposed cradle-to-grave security. It's what the doctors are up against with proposed socialized medicine.

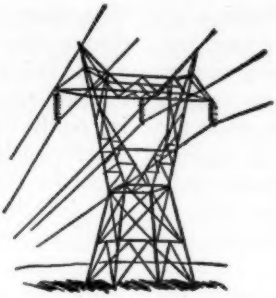
There are signs of real hope in the world today, however, heartening signs that when we *can* get over to the people the fallacy of the theme "something for nothing," they wake up and respond. What happened in the recent British election is encouraging, as was the overthrow of the socialistic régimes in New Zealand and Australia last winter. It shows that the fight is not hopeless.

Nevertheless, in this Cold War on American enterprise, we are now mighty close to a point which demands a showdown on the conflicting social and economic philosophies. It is a time when American business and industry must plan and work for survival. It is a time for general awakening and recognition of the handwriting on the wall. Mere *belief in* private enterprise is no longer enough. The necessity for a *climate of democracy and individual freedom* in which private enterprise can live must be recognized. And if we want it to live, work and fight must be the price of preservation. Business, generally, can no longer "let George do it" and survive by *hoping* he does.

Business is the core—the living expression of the American enterprise system. If we toss in the towel and lose by default; if we fail to gain and hold the confidence of the people, the Cold War on the American way will give way to the clammy hand of Welfarism, Statism, Socialism, Communism, or whatever you want to call it. By any name, the form remains the same with the inevitable result of throttling our great democracy.

"MUCH confusion over the evolution of our national economy might be eliminated if there were agreement on the proper rôle for the government to play. In our opinion, the government's rôle should continue to be in general that of the regulator. The real danger arises when the government branches out into direct competition with private enterprise and when it attempts to put an industry or profession into a strait jacket, as in the proposal for compulsory health insurance. Big government will have its hands full if it corrects the abuses in our free enterprise system, prevents any faction from paralyzing our highly integrated economy, regulates every natural monopoly, protects the rights of individuals, and keeps the door of opportunity open. Only a strong and stable government can perform this essential task effectively. Those who would prevent the government from rendering this essential service are not hindering the advancement of the welfare state but are contributing to the destruction of free enterprise through neglect of its excesses."

—EDITORIAL STATEMENT,
The Washington Post.



Engineers Blast Federal Power Policy

Federal power policy has been criticized from a new source in a recent report filed with the President's Water Resources Policy Commission by a committee representing the nation's engineering profession.

By F. F. PAGE*

Position of the public utilities that the Federal government ought to get out of the power business and stay out has received a strong technical and scientific boost from a highly valuable ally, the organized engineering profession, over 100,000 members strong in five separate organizations.

Unlike the leaders of the utilities field, who for years have been protesting Federal encroachment and usurpation of power development rights, the members of the engineering profession—largely employees—cannot be accused of selfish motivation in their blunt charges that "big government" is off base in taking over functions properly belonging to business.

Members of the profession, as a matter of fact, have been the ones who benefited the most from the growing welter of hydroelectric and other water resources projects—as evidenced by the highest level of employment and the highest level of income in the profession's history. Now, in a report to President Truman's Water Resources Policy Commission, the profession is saying, in effect:

Sure, we like a fat pay check as well as the next fellow. But the distinguishing mark of any profession is putting service above self. And we know, and we know you know—from President Truman, Congress, "both political parties," and a swarm of top bureaucrats on down—that the Federal water resources practices are "excessive and unsound"; that they have been in response to pressure and trading; are the result of "overlapping functions" and "impressively expen-

*For personal note, see "Pages with the Editors."

sive" competition between numerous Federal agencies; that they have been too often planned around producing social changes, and programmed out of political expediency, and are economically unjustifiable.

That's mighty straight talk for a professional group that for years has considered heretics those among them who tried to tell them that there is more responsibility for an engineer than devotion to the technical phases of his profession. So when the more than 100,000 members of American Society of Civil Engineers, American Institute of Mining and Metallurgical Engineers, the American Society of Mechanical Engineers, American Institute of Electrical Engineers, and the American Institute of Chemical Engineers, which are banded together in Engineers Joint Council, speak in such manner, it gives rise to some serious thought.

As eloquent and forceful as any ever made by leaders in the privately owned, tax-paying public utilities is the following dictum ringingly enunciated by the engineers' report:

"As to Federal development of hydroelectric power, there should be no subsidization in respect to capital costs. In principle, there should be no sale of power at less than the appraised value upon which the construction of the project was predicated. In any event, there should be no subsidization by way of sale of power at less than its true cost.

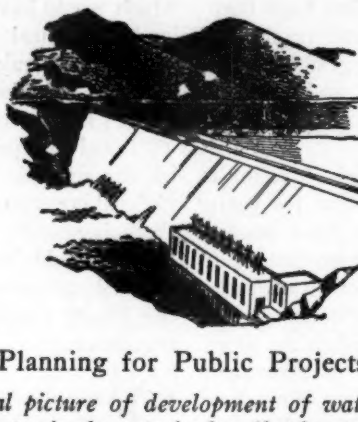
"In computing the costs of Federal water resources developments, including computations for the purpose of determining economic justification, there should be included amounts equivalent to the taxes which would have to be paid were the lands, physical improvements, and business, if any, not exempt from taxation, whether Federal, state, or local. (This includes income taxes.)

"Local enterprise should not merely be encouraged, but, as against the Federal government and except where there is specific reservation by Congress, should have priority to make hydroelectric power development under proper governmental control and regulation.

"For power sold and for power development licenses at Federal dams, the Federal government should require and receive payment at rates not less than such as correspond to the appraised power value upon which the construction of the project was predicated, excepting only where the pertinent market prices ('market values') actually are less than such rates. The aim should be to secure, as cash income to the Treasury, the full value of the power as appraised at the time of authorization or appropriation for the project.

"The sale of Federal power should in general take place at the generating stations. Except where absolutely essential for its own needs, the Federal government should engage in transmission of power only when and where necessary in order to attain higher net income to the Treasury, after subjecting the transmission facilities to the same bases of cost determination as should be used for the Federal water developments proper.

"Except for meeting the needs of the Federal government, authorizations for Federal hydroelectric power



Better Planning for Public Projects Needed

"The general picture of development of water resources in the United States is characterized as 'haphazard,' and the warning is sounded that today no single part of the country is in such undeveloped or overdeveloped state, from the water resources standpoint, as to 're-quire neither thoughtful preparation or planning nor equally thoughtful translation into action.'"

construction should be predicated upon the cash income to the Treasury from the sale of the power. In any case, authorizations should fully disclose the power purpose and should be made solely by Congress itself.

"Suitable provision should be made in law whereby states or their nominees or other local agencies may acquire hydroelectric power developments or transmission lines constructed by the United States.

"Where well-authenticated, specific needs of national defense must be met and cannot be met from other sources, there exists in that fact alone adequate justification for the Federal development of power. However, a mere general claim of contribution to national defense or to strengthening the national economy should not be treated as constituting adequate justification of a project or even as affording part of the tangible benefits or value required for economic justification.

"Federal hydroelectric projects cannot be reasonably used as measures of economic efficiency or of propriety of costs or rates for privately produced power."

The EJC report, prepared by an 80-man task force of members of the engineering profession, was filed with the Water Resources Policy Commission July 1st, a deadline the commission had set for it. The report surveys the entire national water resources policy, or lack of it, and denounces Federal practices in such fields as irrigation, rivers and harbors, flood control and water conservation, reclamation, drainage, navigation, and inland water transportation, and

other fields as roundly as it did those in the hydroelectric field.

The general picture of development of water resources in the United States is characterized as "haphazard," and the warning is sounded that today no single part of the country is in such undeveloped or overdeveloped state, from the water resources standpoint, as to "require neither thoughtful preparation or planning nor equally thoughtful translation into action." Placing the blame for the "chaotic situation" that exists, the report describes it as "neither simple nor fruitful," but it declares that both political parties "respond almost unanimously to pressure and trading."

It raps directly at paternalism by reminding those weighing a national water policy that "public money is limited in availability," and that many public needs compete for what there is. It terms the 1950 Rivers and Harbors Bill passed by Congress, authorizing expenditure of more than $1.8 billion, as a measure about which "no one, least of all the President, is under the misapprehension" that it is "sound with respect to the wisest expenditure of public money." It cites the rise in expenditures for development of water resources — from the $5 billion in all the years prior to 1947 to a like expenditure in 1948 alone and projects under planning costing $20 billion—as evidence that sound criteria are needed for determining not which projects are merely "good," but which are actually "best."

THE report condemns the "surprising degradation in the application of any criteria to water resources development" that has characterized the last two decades and warns that "the application of no criteria must result in chaotic and indiscriminate expenditures, in which the good and bad projects are indistinguishable."

The report also calls for a whole new approach to government water resources development, including Federal intervention only when it is essential to the national defense, when such intervention will be of substantial benefit to all of the people throughout the nation, or to aid in financing of the cost of construction of works for the benefit of a limited number of people on terms equitable to all other citizens of the nation (*i.e.*, making sound loans, repayable with interest within the useful life of the works, on the fundamental point that those who benefit directly from the construction of such projects should repay all costs properly allocable to the production of such benefits).

It recommends that, wherever feasible, water resources development be by local enterprise—governmental or private. The Federal government should never undertake any water development which is not economically justifiable, and those that it does undertake should be part of a comprehensive plan for streams or basins, it adds. Blanket authorizations for projects should be forbidden, Congress should look into any projects in which substantial changes are planned after initial authorizations have been made, and any authorization should automatically become void when it exceeds the originally estimated cost by 20 per cent or more.

THINKING of many people in the public utilities field about claimed

benefits of projects could not be more pointedly stated than in the report:

"It is notorious that standards of feasibility of public projects have progressively been lowered by exaggeration of the benefits claimed as offsets to cost of construction of works. . . . Unless this trend be reversed, estimates of benefits will soon become mere excuses for justification, not valid reasons for construction of projects."

To cure that situation, the engineers' report proposes creation of an over-all board to make an impartial analysis and appraisal of all Federal water projects and to have that board's review and report on each project be a prerequisite to authorization or appropriation by Congress.

In other points made in the report, the engineers:

Demand that the Bureau of Reclamation "recognize the obligation of public utility service and not use such contracts to implement social change."

Declare pollution of water should be regulated at the lowest governmental level adequate for the particular situation.

Insist that flood control should not be, as it has become, the sole concern of the Federal government, and that Federal participation in flood control should recognize that the cost of its provision should be borne proportionately by those who benefit.

Declare "incentive payments" to agricultural landowners for taking necessary steps to prevent erosion by wind and rain are without justification, since the benefits of withholding the soil, to the owner, "Are so obvious as to require no proof."

Ask that conservation practices be applied on watersheds before the construction of small detention reservoirs is either started or approved.

Declare the proper emphasis of all soil conservation measures should be on sustained utilitarian usage and not for the sole purposes of flow retardation and soil conservation.

Cite a greater than doubling of maintenance costs on rivers and harbors in the last eleven years — from $37,600,000 in 1938 to $83,500,000 in 1949—in warning that by the constant initiation of new projects the Federal government is creating an "ever-growing annual charge" for maintenance, operation, and care of waterway projects.

Classify as "completely devoid of any justification" a number of inland waterways projects; suggest that a study be made annually to determine which are not economical; and recommend that an effective method be established for termination of those which are uneconomical.

Ask for a "general discontinuance of public subsidies."

Deplore the "progressive trend toward shifting the entire burden of water resources projects" onto those who bear the expense of government through taxation, and warn that unless development of water resources is to "be permitted to degenerate into the diversion of national income for the benefit of particular regions or classes of people for political expediency" there must be a reversal of the present trend and acceptance of obligations.

Ask a halt, in view of the "economic liability" of agricultural surpluses, of further projects for the reclamation of

land for agriculture, by drainage or otherwise, until the need for more agricultural products has been clearly demonstrated.

Recommend that in determining the economic justification for any Federal project, no monetary benefit be assigned to the recreation, fish and wild-life functions of water projects (such appraisal cannot be other than unrealistic and arbitrary), except only such income as is collectible or such contributions as will be made by state of local interests for this aspect.

The water resources report marks the third time since the war that the five engineering societies, linked through EJC to handle common professional problems, have undertaken major public service reports at the Federal level.

Earlier, plans for disarming both Germany and Japan, so completely that neither could again become a threat to peace yet would not become economic millstones around the necks of the Allies, had been outlined in detail by EJC.

The Farewell State

"An alluring, deceptive new term has been creeping into our political language. The kind of government which promises to give everybody health, houses, security, and the comforts of life is being called 'the Welfare State.'

"Nobody opposes welfare. By hard work and ingenuity we have been able, under American freedom, to produce a great deal of welfare, and to distribute it widely among the people. The American record in this respect far exceeds that of any other nation in any time. We can carry it much further.

"Promises of abundant welfare have been made by many governments, from ancient Rome to Hitler and Cripps. And now Truman. Those governments have always eventually gone bankrupt, or to war, or both. The people have been left with less welfare than before.

"The only governments that have achieved truly remarkable records for the welfare of their people are the very few that, like ours, have left the people fairly free from restrictions, and fairly free from the overwhelming taxes that welfare measures cost.

"The people have then produced their own welfare by working for it. They have had to pay little percentage to bureaucrats for its enjoyment. They earned it and it was theirs. Having no Brannan plans, they were able to buy their own groceries.

"An honest name for the 'welfare state' would be the 'farewell state.' For once we go far enough toward government guaranties of welfare, we can say farewell to American freedom as Americans long knew that blessed condition. And to American standards of welfare."

—Editorial Statement,
Farm Journal.

An Answer to the Inflation Dilemma in Rate Making

PART II

In the first instalment, these authors discussed in principle the dilemma of the typical regulatory commission trying to fix rates during a period of inflation. On one hand, the courts require reasonable results. On the other hand, the courts refuse to endorse or be bound by particular methods. This poses a problem for the commission to find some workable basis for recognizing and balancing the equities of the investor and consumer with due regard for price fluctuation. Factors of investment timing, purchasing power, and attraction of capital must all be considered. This second part presents a practical plan for such regulatory treatment.

BY JOHN W. KUSHING AND
GROVER C. WIRICK, JR.*

CLOSELY associated with the variation in the rate of return on equity capital is the fact that the utility company's investment, once made, cannot be considered permanent. There is a constant turnover of the property represented by such investment. Property is worn out and used up. Funds obtained from the ratepayers to compensate for this property consumption are generally reinvested in new plant to replace that being retired. In addition to this reinvestment there is usually a gradual growth in the equity account to take care of the new plant necessary to provide for an expanding business. This new capital may come from new stock flotations or from earnings retained in the business. These two items added together (*i.e.*, the reinvestment of funds obtained from customers through the depreciation expense, and the new funds obtained either from new issues or retained earnings) make up what might be termed the *annual incremental investment.*

Considering the first portion of this incremental investment, the reinvested portion, we can take the view that the depreciation expense actually represents a return of capital to the stockholders (or "disinvestment"). In other words, this capital had been invested originally by the stockholders at the going rate current at the present

---

*For personal note, see "Pages with the Editors."

time. This is an important distinction to bear in mind as we approach consideration of the equitable treatment of later-day stockholders, in determining a reasonable rate of return.

ACTUALLY, the annual depreciation expense, when collected and set aside, represents return of the sum of many increments of original investment running back to the age of the oldest plant still in existence. But any attempt to identify all these increments, by years, would be an impossible statistical task. So the present analysis makes a first-in-first-out assumption in regard to these particular amounts.

To explain this further, it can be seen that the present equity account represents the sum total of these annual incremental investments, cumulated from the current year backwards, until their aggregate equals the current amount. Stated in another way, the *present* equity investment is made up of the net increases in the equity account for recent years, *plus* the reinvestment of funds returned through depreciation accruals during these years. The latter, of course, embrace funds which were originally invested over the whole history of the company.

The importance of this concept, of the current equity investment, consisting of increments of investment made over a span of years, emerges for the following reason: *The proposed earnings requirement is equal to the sum of the investments made in each year multiplied by the common stock rate of return prevailing in the respective years!* That is a rather meaty statement in principle; but a simple example should make it more easily understood.

SUPPOSE a new company starts with $1,000 invested in utility operations, all common stock investment. At the time this investment is made, the market (as evidenced by the earnings and prices of similar companies and the prospective earnings and market price of the instant investment) indicates a 6 per cent earnings-price ratio. The required earnings for the first year would obviously be $60. Next, assume that a depreciation rate of 10 per cent and that normal growth require $100 of new investment in the second year, with the going rate now 7 per cent. The calculations concerning the second year's required earnings are as follows:

Total investment—$1,100		
Invested in second year:		
New investment	$100	
Depreciation expense reinvested	$100	
Total	$200 @ 7%=	$14.00
Balance of first year's investment remaining	$900 @ 6%=	54.00
		$68.00

which is equal to 6.18 per cent on $1,100.

During the third year, assume $200 new investment and a going rate of 5 per cent—total investment is now $1,300—the calculations may be formalized as shown in the table, page 84.

The last column shows that the $300 invested in the third year at 5 per cent, plus the $200 in the second year at 7 per cent, plus the $800 from the first year—necessary to complete the $1,300 total invested—gives us an earning requirement of $77, or a return of 5.92 per cent on $1,300.

Note well that, in the second year's computation, the earnings required

did not go up to $77 (*i.e.*, 7 per cent on $1,100), even though the going rate was 7 per cent (and the original cost and prudent investment were both $1,100). Yet investors were not harmed because they were receiving what they could reasonably have expected when they invested. Similarly, in the third year's computation, even though the current rate decreased to 5 per cent, the required earnings did not decrease to $65 (as they would had an entirely original cost or prudent investment base been used). Incidentally, if we assume a constant price level in the above, a reproduction cost rate base would have given the same result as original cost. This would be unfair to the consumer in the second year, and to the investor in the third year.

Adjustment for Purchasing Power

The foregoing example has given effect to all factors of the proposed method except changing price levels. Price levels do change, and it is to compensate for such change that the remaining element of the required earnings method is intended. In a reproduction cost rate base, some index or comparison of the costs of construction is used to determine the price level adjustment. A moment's reflection indicates the fallacy in this. If the administrative agency takes as its criterion the fairness to both investors and consumers of the prices charged, a *purchasing power index* is obviously more appropriate.

After all, the objective of all earnings is to provide purchasing power.

Looking at the same principle from another approach, the consumer, if he is overcharged for utility service, is deprived of buying other things that ordinary individuals usually buy. Obviously, the same purchasing power measure should be used. The U. S. Bureau of Labor Statistics "Index of the Cost of Living," or "Consumers' Price Index," as it is now known, is ideally suited for this purpose. It is used by converting the index to a conversion factor related to a period of one or more years. This will convert the dollars, identifiable with any given year, to dollars equivalent in terms of purchasing power for that year.[1]

[1] We do this by simple multiplication; *e.g.*, if the indices averaged 135 in the 5-year comparison period 1943-47 and the 1934 index were 96, the relative purchasing powers would be the reciprocals of these x 100 or .74 and 1.04, respectively, and the conversion factor for 1934 would be 1.04/.74 or 1.41. To convert any 1934 expenditure to 1943-47 dollars then it would only be necessary to multiply by 1.41. If all annual increments of investment are converted to such dollars first, the entire succeeding computations can be carried on as though price levels were constant. Only the final required earnings must be converted back (by dividing by the factor for that year) to obtain required earnings in terms of dollars of the year considered for comparison with actual earnings, fixed charges, rate base, and other comparisons.

(1) Year	(2) Change in Common Stock Equity	(3) Depreciation Accrual	(4) Annual Incremental Investment	(5) Total Equity	(6) Rate	(7) Required Earnings
1	$1,000	—	$1,000	$1,000	6%	$48.00
2	100	$100	200	1,100	7%	14.00
3	200	100	300	1,300	5%	15.00
						$77.00

Consider the previous example, for instance, and assume the cost of living index at 90 the first year, 100 the second year, and 110 the third. The respective purchasing power factors would then be 1.22, 1.10, and 1 and the example for the third year, as modified for price changes, would be as shown in the table below.

This represents a rate of 5.95 per cent on the converted equity of $1,530, compared with 5.92 per cent on the unconverted equity of $1,300 which was obtained in the original example. The conversion from the original example to this one was made by multiplying the figures in columns (2) and (3) by the factors given above. Column (4) was obtained as before by adding columns (2) and (3), and column (5) by cumulating column (2). Column (6) is the same as before and column (7) was calculated by the same procedure as before, but using the converted dollars.

The effect in this case is substantial. It increases our earnings requirement from $77 (unadjusted for purchasing power) to $91. But this is because of the exaggerated assumptions, (1) that the cost of living increased over 20 per cent in two years, and (2) that the bulk of the investment was made in the year of the lowest index.

Let us now consider the result of the application of this method of determining the level of earnings required to balance consumer and investor interest. We may say, first, that it grants to the common stock investor an amount sufficient to compensate the average dollar of equity investment with earnings equal to the amount demanded by the investor at the time each portion of the presently employed investment was made. Further, this investment includes those dollars representing reinvestment of the money returned to stockholders through depreciation accruals, with all dollars converted to present-day dollars in terms of purchasing power. This is to eliminate the inequities of fluctuating value of the dollar. As a by-product, we observe that consistent application of this technique, over time, would probably result in more stable earnings. Such a result would benefit the investor by reducing the risk of fluctuating earnings. It would also benefit the consumer since reduction of the risk would result in lower capital costs and, therefore, cheaper service.

Example of Application

As an illustration of an application of the required earnings technique, a more comprehensive example has been worked out, using as a basis the actual cost and capital structure of two large utility companies. The re-

(1) Year	(2) Change in Equity	(3) Depreciation Accrual	(4) Annual Incremental Investment	(5) Total Equity	(6) Rate	(7) Required Earnings
1	$1,220	—	$1,220	$1,220	6%	$60.60
2	110	$110	220	1,330	7%	15.40
3	200	100	300	1,530	5%	15.00
						$91.00

TABLE I

COMPARISON OF APPLICATION OF REQUIRED EARNINGS METHOD WITH ACTUAL EARNINGS FOR TWO COMPANIES

(Dollars in $000)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	In Actual Dollars			Based on 1943-47 C/L Dollars				Based on Current Dollars*				
Years	Actual Earnings On Equity	Common Stock Equity	Actual Returns On Equity	Actual Earnings On Equity	Required Earnings On Equity	Common Stock Equity	Required Returns On Equity	Required Earnings On Equity	Fixed Charges Requirement	Total Earnings Requirement	Calculated Rate Base	Required Rate of Return
Company A												
1935	$ 4,837	$39,591	12.22%	$ 6,675	$ 3,166	$41,322	7.66%	$ 2,294	$8,147	$10,441	$203,470	5.13%
1936	4,828	41,774	11.56	6,566	3,408	44,291	7.69	2,506	8,491	10,997	208,051	5.29
1937	6,224	43,709	14.24	8,216	3,680	46,845	7.86	2,788	8,140	10,928	214,015	5.11
1938	5,376	46,998	11.44	7,204	4,176	51,254	8.15	3,116	8,023	11,139	223,924	4.97
1939	6,250	52,075	12.00	8,500	4,836	58,157	8.32	3,556	8,134	11,690	233,555	5.01
1940	7,541	54,065	13.95	10,180	5,125	60,844	8.42	3,796	8,175	11,971	239,228	5.00
1941	5,920	51,763	11.44	7,637	5,200	59,607	8.72	4,031	7,935	11,966	239,290	5.00
1942	4,156	51,104	8.13	4,821	5,320	58,844	9.04	4,586	8,043	12,629	237,226	5.32
1943	4,430	51,911	8.55	4,829	5,463	59,724	9.15	5,012	8,075	13,087	230,144	5.69
1944	3,624	51,913	6.98	3,914	5,425	59,726	9.08	5,023	8,144	13,167	232,392	5.67
1945	3,932	51,147	7.69	4,129	5,282	58,922	8.96	5,030	7,855	12,885	243,393	5.29
1946	11,719	73,295	15.98	11,367	6,953	80,406	8.65	7,168	6,344	13,512	250,343	5.40
1947	11,581	75,240	15.39	9,844	7,305	84,760	8.62	8,594	6,253	14,847	258,999	5.73
Company B												
1935	$ 9,678	$150,162	6.45%	$13,356	$12,363	$184,267	6.71%	$ 8,959	$6,008	$14,967	$273,015	5.48%
1936	10,671	153,011	6.97	14,513	12,301	188,141	6.54	9,045	5,767	14,812	275,764	5.37
1937	9,951	155,311	6.41	13,135	12,224	191,177	6.40	9,276	5,512	14,788	283,531	5.22
1938	7,833	155,416	5.04	10,496	12,037	191,318	6.29	8,983	5,556	14,539	288,755	5.04
1939	9,640	155,766	6.19	13,110	11,927	191,794	6.22	8,770	5,638	14,408	289,927	4.97
1940	10,733	156,908	6.84	14,490	11,974	193,336	6.19	8,870	5,812	14,682	289,903	5.06
1941	12,443	157,943	7.88	16,051	12,382	194,671	6.36	9,598	5,743	15,341	297,480	5.16
1942	7,838	157,259	4.98	9,092	12,457	193,877	6.43	10,739	4,807	15,546	291,422	5.33
1943	8,791	158,323	5.55	9,582	12,528	195,037	6.42	11,494	4,802	16,296	281,624	5.79
1944	6,545	157,033	4.17	7,069	12,490	193,644	6.45	11,565	4,795	16,360	282,305	5.80
1945	7,931	156,951	5.05	8,328	12,475	193,558	6.45	11,881	4,802	16,683	278,019	6.00
1946	10,631	160,213	6.64	10,312	12,755	196,722	6.48	13,149	4,055	17,204	286,935	6.00
1947	11,113	166,043	6.69	9,446	13,248	201,678	6.57	15,586	4,331	19,917	311,085	6.40

* "Current Dollars" means either actual dollars (columns 10 and 12) or 1943-47 dollars converted back to dollars current in the respective years (column 9).

sults are shown in the accompanying tables. Actual figures taken from published reports were used to add realism to the illustration.

The example may not fully represent the results of a thorough application of the method. That would require a complete analysis of investment and property accounts and the making of appropriate adjustments. But it should give a good idea of the practical application of the method discussed above.

TABLE I is a summary of the pertinent data: required earnings obtained by the method; restatement of the results obtained converted back to actual dollars for the respective years; and computations showing the rate of return had these required earnings prevailed in past years.

Table II (page 88) shows details of computation of the required earnings, columns (2), (3), and (4) showing the calculation of the annual incremental investment in actual dollars, columns (5) and (6) illustrating the conversion of this item to "standard" 1943-47 cost of living dollars, and the remaining columns the computation of the required earnings. Column 8 requires special comment. It is the result of converting all annual equity changes (from December 31st of the preceding year to December 31st of the given year) to standard dollars and cumulating these changes.

In the example shown, the years prior to 1920 were represented by the equity, as of December 31, 1919, of $10,508,000 converted on the basis of an estimated conversion factor of 1.40. This is taken to represent a sort of average effect of purchasing power of the dollar prior to that time. The converted amount of $14,711,000 is less than 20 per cent of the converted equity at December 31, 1947.

TABLE III (page 90) shows, in detail, the process of arriving at required earnings of column (9) of Table II. Columns (3) and (4) show the computation for 1947, columns (5) and (6) for 1946, and (7) and (8) for 1945. It will be noted in comparing column (4) with column (6) that the figures are identical except for the first (1947) and last two (1940 and 1939). In actual practice the computation can in fact be carried on continuously, starting with the most recent year, deducting the first year from the total, and then building up the second year's result, etc. Tables II and III have been shown in respect to Company A only, since they are only intended to illustrate the computation.

Referring to Table I, substantial differences will be noted between the results on Company A as compared with Company B. Column (5) actual earnings converted to "standard" dollars (*i.e.*, in terms of 1943-47 purchasing power) for comparative purposes have been higher than those in column (6), required earnings, in all but four of the thirteen years shown for Company A. The same comparison for Company B reveals that in seven of the thirteen years its actual earnings have been below the required earnings. More specifically, in the years 1943-47 Company A has earned 11.20 per cent more on its common stock equity than the required earnings while Company B has earned 29.54 per cent less, and for the entire thirteen years Company A has earned

TABLE II

COMPUTATION OF ANNUAL INCREMENTAL INVESTMENT AND REQUIRED EARNINGS

Company A (Dollars in $000)

(1) Year	(2) Change In Common Stock Equity	(3) Depreciation Accrual	(4) Annual Incremental Investment	(5) 1943-47 C/L Conversion Factor	(6) Converted Incremental Investment	(7) Earnings-Price Ratio	(8) Cumulative Converted Equity	(9) Required Earnings*
1919**	$10,508			1.40			$14,711	
1920	2,860	$ 899 est.	$ 3,759	0.94	$ 3,533		17,399	
1921	—15	936 est.	921	1.06	976		17,383	
1922	—677	1,082	405	1.13	458		16,618	
1923	852	1,116	1,968	1.11	2,184		17,564	
1924	1,701	1,320	3,021	1.11	3,353	9.80%	19,452	
1925	1,263	1,392	2,655	1.08	2,867	8.45	20,816	
1926	1,892	1,536	3,428	1.07	3,668	8.60	22,840	
1927	5,541	1,536	7,077	1.09	7,714	8.50	28,880	
1928	2,390	2,000	4,390	1.10	4,829	7.50	31,509	
1929	6,467	2,300	8,767	1.10	9,644	6.70	38,623	
1930	1,504	2,773	4,277	1.13	4,833	6.85	40,323	
1931	354	2,784	3,138	1.24	3,891	7.10	40,762	
1932	244	2,784	3,028	1.39	4,209	8.25	41,101	
1933	167	2,784	2,951	1.46	4,308	8.00	41,345	$3,128
1934	—1,640	2,850	1,210	1.41	1,706	9.10	39,033	2,940
1935	1,659	2,850	4,509	1.38	6,222	9.00	41,322	3,166
1936	2,183	3,150	5,333	1.36	7,253	8.00	44,291	3,408
1937	1,935	3,876	5,811	1.32	7,671	8.25	46,845	3,680
1938	3,290	4,026	7,316	1.34	9,803	8.75	51,254	4,176
1939	5,076	4,680	9,756	1.36	13,268	8.25	58,157	4,836
1940	1,990	5,160	7,150	1.35	9,653	8.50	60,844	5,125
1941	—959	6,300	5,341	1.29	6,890	11.00	59,607	5,200
1942	—658	7,302	6,644	1.16	7,707	11.00	58,844	5,320
1943	807	6,675	7,482	1.09	8,155	9.00	59,724	5,463
1944	2	7,383	7,385	1.08	7,976	8.00	59,726	5,425
1945	—766	6,552	5,786	1.05	6,075	7.50	58,922	5,282
1946	22,148	7,054	29,202	0.97	28,326	7.89	80,406	6,953
1947	5,122	7,557	12,679	0.85	10,777	8.20	84,760	7,305

*Expressed in "standard" dollars in terms of 1943-47 average cost of living index.

**"Change in Common Stock Equity" (column 1) for 1919 is equity as of December 31, 1919, representing sum of all net changes prior to that time. "Conversion Factor" (column 5) for 1919 represents an estimate of the average for prior years. "Cumulative Converted Equity" (column 8) for 1919 equals product of (2) x (5). For other years column 8=sum for previous year plus product of column 2 x column 5.

43.68 per cent in excess of the indicated "required" earnings, while Company B has averaged 7.57 per cent below.

It should be pointed out that while the required return on stock equity, column (8), is higher for Company A, the rate of return shown in column (13) is lower. This is due to the fact that Company A has had a high rate of debt to total capitalization (70-75 per cent) while Company B has had a smaller portion of debt (about 50 per cent).

Criticism of Method

It should be emphasized that this approach is not being suggested as an objective formula for specific determination of the proper earnings. It is urged simply as another valuable regulatory tool. It is submitted as a test of the appropriateness of requirements that may be arrived at by any process of reasoning—whether these be by formula or judgment. The courts have taken the attitude (*e.g.*, Hope Natural Gas Case)[2] that the *method* of arriving at the result shall not be questioned as long as the end result is reasonable. Hence, the practical usefulness of a method which gives us one way of judging or measuring the reasonableness of the result. It starts with explicit premises and proceeds in a methodical manner to the conclusion.

There are some obvious weaknesses in the method. The most apparent is the use of the earnings-price ratio as a measure of the "expectation" of the investor. This ratio is very easily distorted by unusual circumstances, regarding either the price or the earnings factor. For example, a company may have very low earnings or even a loss during a given year, in which case the earnings-price ratio is meaningless. On the other hand, the stock price may be pushed to an extreme in either direction because of irrational behavior of the market (irrational, that is, with respect to stock price, as related to any reasonable expectation of earnings, as in the 1929 situation).

A good deal more research on this particular question would be helpful, whether or not the required earnings method were adopted. Other current methods of establishing rates of return usually give consideration to a reasonable rate on common stock.

In addition to the foregoing criticism, it is well known that dividend policy has a substantial effect. For example, a stockholder would pay more for a stock earning $2 per share and paying $1.50 in dividends per annum, other things being equal, than he would for one earning $2 but paying no dividends. After all, dividends are one of the basic objectives of common stock investors. Modifications stemming from the above criticisms need not impair the basic theory of the method, however. They would have to do only with the precision of facts that are used in the method.

There is one other consideration that the technique does not recognize, but which is an important one in determining the *proper* earnings for a company. The proposed method adopts an *a posteriori* attitude toward capital structure. It accepts the past capital structure and the associated costs of various types of capital and

---
[2](1944) 320 US 591, 51 PUR NS 193.

offers no definite incentive to improve the structure—*i.e.,* to rearrange the portions of various kinds of securities so as to achieve the lowest long-term over-all cost of capital. The regulatory process might well be more effective in achieving low capital costs if rate making were such that the process would offer a positive incentive to management to obtain the *optimum* capital structure. This would certainly be better than reliance on mere watchdog methods in the absence of such an incentive. However, other presently used methods do not offer such incentives. So, our proposed required earnings method does not suffer by comparison on that score. If such an incentive can be attained in this or any other method it would, of course, be a very valuable refinement.

Conclusion

REGULATORY bodies have been faced with a dilemma, especially during periods such as the recent period, in which rapid price changes have taken place. They are bound by legal pronouncements to the effect that they must be fair and just in their rate determinations. But they cannot have the sanction of the courts for any particular formula of rate making. The former injunction implies an objective approach by which the rate base-return formula can be altered to suit changing economic circumstances. Yet any objective or scientific attempts have a tendency toward formulism, as

TABLE III

EXAMPLE OF COMPUTATION OF REQUIRED EARNINGS

Company A (Dollars in $000)

(1) Year	(2) Earnings-Price Ratio	(3) 1947 Converted Incremental Investment	(4) 1947 Required Earnings (2)x(3)÷100	(5) 1946 Converted Incremental Investment	(6) 1946 Required Earnings (2)x(5)÷100	(7) 1945 Converted Incremental Investment	(8) 1945 Required Earnings (2)x(7)÷100
1947	.. 8.20%	$10,777	$ 884				
1946	.. 7.89	28,326	2,235	$28,326	$2,235		
1945	.. 7.50	6,075	455	6,075	455	$ 6,075	$ 455
1944	.. 8.00	7,976	638	7,976	638	7,976	638
1943	.. 9.00	8,155	734	8,155	734	8,155	734
1942	..11.00	7,707	848	7,707	848	7,707	848
1941	..11.00	6,890	758	6,890	758	6,890	758
1940	.. 8.50	8,854	753	9,653	821	9,653	821
1939	.. 8.25			5,624	464	12,466	1,028
1938	.. 8.75						
Total Converted Investment—1947		$84,760					
Total Required Earnings—1947			$7,305				
Total Converted Investment—1946				$80,406			
Total Required Earnings—1946					$6,953		
Total Converted Investment—1945						$58,922	
Total Required Earnings—1945							$5,282

they become better defined or more widely understood.

However, the commissions are charged with the responsibility of establishing rates which will enable the utilities to meet their obligations to the public. This, in turn, requires earnings sufficient to enable them to attract substantial amounts of capital in competition with unregulated business which has no ceiling on its earnings.

At the same time, these commissions must not allow rates which unduly burden the ratepayer.

In the public interest, the bargains made with investors should enable the service to be supplied at the lowest over-all cost. Under such circumstances, the revenues supplied by the customers should provide an efficiently managed utility with sufficient funds to meet operating expenses and the requirements of security holders' contracts, including the legitimate expectations of the common stockholder.

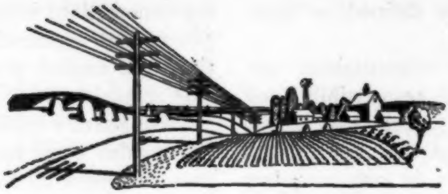
THE proposed method attempts to apply the principle of fairness: (1) to customers in that they shall pay no more than is necessary to attract the needed capital, and (2) to the investors in that they shall be given the opportunity to earn the full value of the expectations in current purchasing power that appeared necessary at the time the capital presently employed was acquired.

In its narrow application the formula provides a test based on these fairness considerations against which determinations of necessary earnings can be compared. But in its broader implications it can be conceived that such a principle of fairness, if adopted as a test by rate-making bodies as policy, would have a strong tendency to give assurances to future investors. It would induce them to invest their funds with more confidence in future returns, and, therefore, at a lower cost to the customer. At the same time it would give a stability to the returns from utility stocks that would make better investments of them and assure a more constant flow of these funds to the industry.

In the final analysis, prospective investors are trying to judge the regulatory bodies with respect to the future treatment they might receive from them. Since all such future expectations are based largely on past behavior, the more predictable and certain this behavior, the less return investors will demand as insurance against the uncertainty of its prediction.

"THE end of American help may come sooner than expected. England is getting this aid not from an American Capitalism in a state of robust health, but from an American Capitalism heavily drugged by artificial stimulants, loaded with debt, watered down with socialist ingredients, and facing a slump because of these factors. If there is one prayer the devout British Socialist should send up to the Giver of All Good Things, it is that God will save America from drifting into Socialism."

—EXCERPT *from "The Road Ahead" by John T. Flynn.*



A College Student Looks at Rural Electrification

Is the rising generation "naturally sold" on Federal government power policies, as many economists and political leaders seem to assume? How does the Federal rural power policy, for example, appear to the average intelligent American still in college? Here is an objective and unaided study of the REA—with conclusions of the author, some of which are certainly debatable but obviously sincerely and objectively reasoned. It is presented here simply as an interesting case study of the mental processes of a fairly representative college man when thrown on his own resources and research.

By CLARK M. BRINK*

On May 11, 1935, President Roosevelt, by executive-order, established the Rural Electrification Administration, authorizing it to initiate, formulate, administer, and supervise a program of approved projects with respect to the generation, transmission, and distribution of electric energy in rural areas. This action was taken because America's farms were largely without modern lighting, the telephones, the radios, and the automatic washers to compete in living standards with their city brethren. Technicians, economists, and farmers all agreed that government participation was the speediest way to light up rural America.

The principal obstacle which private power had encountered in its efforts to bring the farmer electricity was high construction cost. Building lines of vast distances for the purpose of serving a scattered few was not considered good business. The prospective returns did not seem to justify the risk.

Private power supported many experiments of various farm and business associations in an effort to find out what could be done to overcome this obstacle of high rates. It also was seeking electrical uses which would make power economically profitable to the farmer even at substantially higher rates than prevailed in urban communities. Such projects as the one in Red Wing, Minnesota, were not too promising. There the Northern States Power Company built a line 6.3 miles in length at a cost of $1,770 per mile, which meant that the farmer would have to pay a rather prohibitive fixed charge of $6.90 per month to justify

*For personal note, see "Pages with the Editors."

such expensive construction, even if he used no power.

THE project, nevertheless, served to educate the farmer on electricity's possibilities. It was then, in 1934, that Dr. White, the superintendent of the project, observed, "It is no longer a question of whether the farmer wants electricity, but where he can find the money to pay for it." The answer of private utilities was that the national level of farm income must be raised to a point where the electric industry could afford to serve agriculture. On the other hand, the national farm associations and also the President contended that the costs of electrical service must be cut to fit the dimensions of existing rural incomes and thus help to increase these incomes.

The late President Roosevelt's executive order received congressional approval on May 20, 1936, in the Norris-Rayburn Act. This act set up the REA as a statutory agency with an Administrator to make loans to "persons, corporations, states, municipalities, peoples' utility districts, and coöperative nonprofit or limited dividend associations." The act states:

> . . . all powers granted under the act are exercised by an Administrator appointed by the President and confirmed by the Senate for a term of ten years at an annual salary of $10,000. He is authorized to make loans and administer the act to persons, corporations, states, territories, municipalities, peoples' utility districts, and coöperative nonprofit or limited dividend associations. Forty million dollars annually is authorized to be apportioned among the states for the purpose of financing the construction and operation of generation plants, transmission lines, and distribution lines for the furnishing of electric energy to persons in rural areas who are not receiving central station power. The loans are not to exceed twenty-five years, the average rate of interest is to be what the United States pays on its obligations of over ten years, and preference is given to public bodies and nonprofit organizations or companies. Loans may be made for the wiring of premises and the purchase and installation of electrical and plumbing appliances and equipment. The Administrator must find and certify that in his judgment the security for the loan is reasonably adequate and will be repaid within the time specified.

The emphasis of the REA program, was to be on the establishment of farm electric coöperatives—with loans not exceeding twenty-five years and prevailing interest rate paid on long-term Federal obligations. These co-ops were to be entirely independent from the government in management and operations, and owned by consumers. The only tie-up with the government was to be financial. REA was to be the banking house for the program, just as Wall Street is for many a private enterprise, and government was concerned with having only a reasonable amount of security for its loans. REA engineers meanwhile would be experimenting and passing on their findings to the coöperatives. REA lawyers would aid the coöperatives in any legal entanglements arising in the various states.

THE result of all these services, it was hoped, would be to enable the farmers to string their own high lines and tap them for a multitude of uses as they chose.

As is stated in the act, REA was to

make its loans to farm coöperatives in "rural areas not receiving central station power." Thus, REA was, seemingly, not launched with the idea of competing with existing private power lines. To see that everyone in the rural areas had reliable electricity was its primary purpose.

With this in mind, REA lawyers went to bat for many a proposed electrical coöperative. What the legal obstacles boiled down to was whether a rural electrification coöperative was a public utility in a legal sense, and thus subject to the jurisdiction of the various state utility boards in regard to even their right to exist, to their rates, and to their expansion. These REA lawyers won important concessions. In state courts, their argument that the state commissions are charged only with the regulation of profit-making public utilities, and that the co-ops in the nonprofit category were outside their jurisdiction, generally prevailed. Again, they went before state legislatures to obtain the necessary assent for the establishment of these co-ops, and to gain legal right-of-way privileges similar to those of the public utilities. Again, they were generally successful.

REA engineers concentrated on cost-saving devices in the construction of transmission and distribution lines. They decided that lines could be strung with poles wider apart, and thus save $70 per mile. Standardizing the voltage for transmission lines on REA projects saved many more dollars in the purchase of insulators and transformers. The co-ops, by jointly purchasing large quantities as units, allegedly brought the cost of household transformers from $60 down to $21, and there were also substantial savings made in meter installation. In some places, consumers were instructed to read their own meters, report their own equipment mishaps, thus cutting down considerably on cost of maintenance.

CONGRESS provided the co-ops with low interest rates on loans, as compared to the customary 6 per cent. This alone saved rural users some $10,000,000 annually. Insurance premiums were cut 40 per cent, saving the co-op members $1,443,250 in the fiscal year ending June 30, 1941. All totaled, these devices permitted the cost of line construction to drop to almost 50 per cent below that of taxpaying public utilities.

With all the numerous cost-saving advantages, there developed a very large demand for REA loans. From 66 borrowing agencies in 1936, the number had expanded to 1,066 by December 31, 1949. Of these, 976 were private co-ops, 25 were private companies, and 65 were public power districts, municipalities, or other public bodies. These borrowers had 939,473

"IT *would appear that since its inception any conflicts between the REA and the private power companies have been sporadic and involved relatively unimportant disputes at the local level. There seems to be no evidence of industry-wide antagonism to the rural electrification program, as such, on the part of the private companies.*"

miles of line in service, serving over 3,031,098 farmers in 46 states. They had borrowed $1,999,279,707 from REA for their projects, a figure made possible by an additional REA grant by Congress of $60,000,000 annually. Furthermore, the majority of the co-ops were paying back their loan obligations to REA well within the specified time. In fact, generally they were several months ahead on their payments.

Since the whole success of the REA program depended upon the lowering of electric rates to the farmer, it is needless to labor the point that this has been accomplished. The proof lies in the above reference of the very growth of the undertaking. Back at the time of the Red Wing experiment the cost of electricity to the farmers involved was about 10.5 cents per kilowatt hour, and in 1928 a similar experiment offered service at the rate of 9.3 cents per kilowatt hour. However, by 1940, in a typical REA coöperative-serviced area, a farmer was paying 4.5 cents per kilowatt hour and this figure included interest and repayment on the REA loan issued to serve him, all maintenance and depreciation, all taxes, and the 1.25-cent kilowatt-hour charge to him for the electricity he used. There seems little reason to doubt that even this figure will fall as the REA loans are gradually paid off. REA's goal is 2 cents per kilowatt hour, a figure which Ontario, which had a 15-year jump on the United States so far as a government-sponsored system is concerned, has almost reached.

With the REA program in operation, there was a sudden climb in the number of farms having electricity. In 1923, only 4.6 per cent of America's farms were provided with electric service, and but 2.6 per cent had central station power. By the time of REA's creation in 1935, this figure had risen to but 10.9 per cent, or 744,000 farms, for rural establishments receiving central station power. Compare these figures with those taken in 1940, when 1,700,000 farms had acquired this service. More had been accomplished in the five years 1935-1940 than in the previous fifty years. Three million eight hundred thirty-eight thousand sixty-two additional farms were connected to power lines between 1935 and 1949 (July 1st), and 57 per cent of these from REA-financed lines. It estimated that by 1951, 95 per cent of the farms would have central station power available.

The nation's farmer obviously liked the system of electrifying himself through his own REA co-op. He was getting electricity, and getting it cheap enough to make it worth while to him. This government-founded project had succeeded in breaking through the economic obstacles which private companies had previously found so difficult. If one were to agree with the late Harry Slattery, a past Administrator of REA, it has succeeded *against* the combined efforts of the public utilities. In his book, *Rural America Lights Up,* Mr. Slattery claims that the public utilities deliberately set out to destroy REA. He said they attempted to arouse fear among the farmers that by signing up with an REA coöperative they would, in effect, put a mortgage on all their wealth. (In reality, the member risks

Breaking the Rural Power Rate Bottleneck

"PRIVATE power supported many experiments of various farm and business associations in an effort to find out what could be done to overcome this obstacle of high rates. It also was seeking electrical uses which would make power economically profitable to the farmer even at substantially higher rates than prevailed in urban communities."

only the loss of his membership fee, usually $5.) Slattery insisted that the utilities refused to coöperate in selling their excess power to the co-ops, even at a reasonable profit. (They demanded two cents per kilowatt hour, as against an alleged reasonable compensation of one cent.) Then, too, there was the building of so-called "spite lines."

According to Slattery, the utilities used the measure in combating REA and its coöperatives. As soon as a coöperative was organized in a certain area, the public utility in that area, which may have not made service available to its farmer population for perhaps twenty years, would hastily construct lines into the proposed coöperative's territory. This was to gain operating rights to the area—for the co-op could not extend to areas already served. It was claimed they would leave sparsely settled, low-income areas for the co-ops, thus making their task an almost impossible one. As a result, the ex-Administrator claimed that eight co-ops were entirely wiped out, and another 192 suffered mileage losses of 15,000 and consumer losses of 40,000. Some were forced to sell out to the utilities.

This is the REA story. It seems that there can be no controversy over the worth or results of the project, especially as it is represented by Mr. Slattery.

But there is another side of the story—an important one. A personal interview with a nationally recognized spokesman provided me with private industry's viewpoint, and here it is as I understand it:

"In most respects, the private electric companies are not adverse to the REA project," the industry man said. "We are not against bringing electricity to the farms; as a matter of fact, we are all for it. But there were just some things that we couldn't un-

dertake, that REA could. REA could reach out and serve areas where private power could never go. For one thing, private enterprise has to pay 6 per cent on its capital borrowings, whereas REA co-ops can obtain loans at a 2 per cent interest rate. We pay taxes, whereas the coöperatives often pay no Federal and usually few local taxes. REA was merely a natural follow-up of the public road system and rural free delivery. I personally am grateful that REA put a hotfoot to many slow companies. Except for REA, we wouldn't have progressed as far as we have.

"But the point is that *private industry has progressed since 1936*—progressed somewhat parallel to and perhaps faster than the REA-sponsored outfits. REA conveniently ignores this fact in its propaganda. Instead, REA reaches back to 1936-37 for displays of private power methods and opinions."

It would appear that since its inception any conflicts between the REA and the private power companies have been sporadic and involved relatively unimportant disputes at the local level. There seems to be no evidence of industry-wide antagonism to the rural electrification program, as such, on the part of the private companies.

There recently has developed, however, a new phase which has met with the violent objection of a majority of the private companies.

This dispute grows out of the initial allocation of about $44,000,000 to "super" coöperatives—that is, coöperatives whose memberships are a group of REA distribution co-ops—in Oklahoma and Missouri, for the purpose of constructing high-power transmission lines and large steam-generating plants which the co-ops immediately would turn over to the sole use of the Department of the Interior.

Transmission lines, on completion, would create a network of highly competitive and duplicating lines paralleling the lines of private companies and, while doubling the load of investment, both private and public, in the area, would not in themselves add any new customers not presently being served.

The REA co-ops have executed contracts that upon completion of these projects transmission lines will be turned over to the Interior Department on 40-year lease, at the end of which time they would become the property of the Department of Interior upon the payment of $10.

In addition, the contracts call for the practical limit of capacity production of the steam plants for the next forty years. The financial agreement is such that the lines and plants would be paid for by the end of thirty-five years. Additional contracts of this sort are pending in Louisiana, Arkansas, and Texas.

Recently Assistant Secretary of Interior Warne made the statement that the Department of Interior would have a power grid extending from New Orleans to Seattle. This would indicate that they intend to extend their alliance with the REA through Iowa to connect up with the Missouri river and tributary dams of the Reclamation Bureau (another Interior Department agency) in South Dakota, North Dakota, and Montana, reaching west toward the Bonneville Administration.

The Interior Department already has a line east from the Southwestern Power Administration grid—SWPA being a power marketing agency of the Department of Interior for power generated at multiple-purpose flood-control and power dams constructed by Army Engineers—to within a hundred miles of the Tennessee Valley Authority.

This latter agency has an interconnecting system extending into the Carolinas, so that a coast-to-coast Interior Department power grid is now far beyond the blueprint phase and in the latter stages of completion.

The Department of Interior-REA proponents of the scheme justify the plan on the grounds that:

1. The private power companies have fallen down on the job of supplying adequate power and this plan, drastic though it is, is necessary for public enterprise to take over where private enterprise has been unable or unwilling to meet growing demands for power.

2. On the basis of opinions of their own solicitors, the scheme is legal. (There is the further fact that even if it is not legal it would be difficult or impossible, according to the lawyers consulted, for opponents of the plan to oppose it on substantial legal grounds in court.)

3. Eventually, under the new scheme, the entire rural area affected will be fully electrified at rates with which the unsubsidized private companies cannot compete.

The contentions of the proponents of private power in this controversy may be summarized as follows:

If the Interior-REA arguments are valid, the proper, appropriate, and only legal method should be for the Department of Interior to submit its request for such lines and generating plants to the Budget Bureau and from the Budget Bureau to Congress, following the usual legal method of obtaining funds for Federal activities by a departmental agency.

Inasmuch as requests for generating plants and similar transmission lines already have been submitted by the Department of Interior and have been flatly refused by the Appropriations Committee and by Congress, it is contended that this method is a transparent subterfuge to by-pass the expressed will of Congress.

They assert that the funds appropriated by Congress to REA were for the specified purpose of electrification of farms and that this proposed "raid" upon enormous funds allocated by Congress for that purpose by the Interior Department with the complaisant connivance of the officials of the REA, establishes a serious precedent of the executive by-passing of the control of the purse strings by the legislative branch of government under the Constitution.

The proposal is only a slick scheme to promote, without the open debate and floor discussion in Congress, the program of nationalization of the electric industry. The taxpayer may be willing to support the legitimate rural electrification program but he certainly has not had an opportunity to pass upon the merits of nationalizing this key industry.

Moreover, it is a very poor deal for the super coöperatives from a business and fiscal standpoint: The 40-year lease completely commits the coöperatives without fail to execute their part of the contract, whereas the Interior Department in both the lease and the purchase of power agreements has written in an "escape clause" providing that the agreements may be canceled at any time that Congress refuses to appropriate the funds for the carrying out of the contracts. Appropriations bills are passed annually. Hence the Interior is actually signing a contract which may be canceled at

any time within any one of the forty years, whereas the farmers are committed to their portion of the bargain without escape for the entire period.

In theory at least and certainly at law the REA is merely a banker whose chief interest is to recapture money loaned by the Federal government to coöperatives borrowing money for the purpose of electrifying their farms. This extension of 40-year contracts obviously means that the Washington bureau of the REA, in giving the Interior a 40-year lease with its co-ops, is perpetuating its own life by forty years.

Some of the congressional opponents of this deal assert that in addition to the ideological push for nationalization of the electric industry by means of the REA-Interior alliance there is a further incentive in the fact that REA has available for disposition nearly a billion dollars of unspent funds. Since the job of bona fide rural electrification is nearly done, it may soon be left with a huge surplus unless other means can be found to dispose of this enormous fund authorization. They assert that legal fees and engineering fees can absorb as much as 10 per cent of a total loan, to say nothing of the profits available to contractors in such construction projects. They maintain that there is a hidden lobby consisting of the powerful potential beneficiaries busily promoting such projects both on Capitol Hill and in the REA.

In this controversy I have come to the conclusion that the REA in its first fifteen years of existence probably was one of the better programs initiated under the New Deal. But if the proposed change of policy involved in the Interior use of REA funds is carried out, we will see a marked change in the program which will not follow the law, the best interests of the farmer, or the best interests of the taxpayer and the nation.

"The world's biggest enterprise, we are hardly surprised to note, shows no symptoms of recession. Senator Byrd reports that the Federal government hired new workers during April [1947] at the rate of more than 350 a day.

"The trouble is that this does not exactly reverse the downward trend. Washington's main industry does not produce the kinds of things people buy. Its chief product—'processed' paper—mostly ends up in filing cabinets.

"Unfortunately, too, the impact of its continued hiring on the general unemployment picture is that of a dole. It does not pay salaries out of earnings but out of the pockets of people engaged in productive activity. Senator Byrd figures the tab for April at more than $1,000,000 per day.

"In a deflationary situation, the classic rule is to cut taxes. The hiring of the Federal government, however, increases taxes, thus making it less possible for people to buy things and thus encouraging decreased production, which means fewer jobs.

"So it is not really a paradox, after all, that the apparent trend-bucking of Bureaucracy, Inc., is not bucking but riding the unemployment trend."

—Editorial Statement,
The Wall Street Journal.

Washington and the Utilities

Atomic Energy for Industry?

THE possible release of atomic energy information to private industry in the United States, Canada, and Great Britain has been unofficially indicated in Washington during recent weeks. Industrial circles are speculating on what this may mean for the electric utilities, and when. There is the belief that some partial release of information will be made, primarily for the purpose of promoting experimentation, rather than launching any significant commercial atomic power development in the near future.

The administration is more or less nonplussed over the criticism of former Atomic Energy Commission Chairman David E. Lilienthal, in his current series of articles in *Collier's* magazine. Lilienthal now contends that government monopoly is holding back development of atomic industrial energy through unnecessary secrecy. He did not feel free to air his critical views as long as he was connected with the commission.

It is not believed that the proposed small release of atomic data will fully meet the objections voiced by Lilienthal, who is pressing for a change in the law and a reëxamination of our entire handling of atomic energy. Senator Brien McMahon (Democrat, Connecticut), chairman of the Joint Congressional Atomic Energy Committee, has been rather noncommittal about Lilienthal's criticisms. But other members of Congress are known to be anxious to have more light on the subject of atomic energy for industrial uses.

The British-Canadian-American plan for gradual release of atomic information to private industry is being worked out. Selected private groups will be permitted to build low-power reactors which will not furnish enough power to run a plant on a practical or profitable basis. But this can be valuable to industry in furnishing preparatory experience for dealing with atomic power development in the future—at a time when the government feels it is safe to release information for large-scale operations. The situation recalls a criticism similar to Lilienthal's which was made by an industry committee, headed by an electric utility executive, in December, 1948.

In the meantime, the commission recently released 16 patents for public use, bringing to 138 the total number of commission-held patents released for public licensing, none of which would be useful in the development or production of power.

Buchanan Softens Lobby Probe

THE House Lobby Investigating Committee, headed by Representative Frank Buchanan (Democrat, Pennsylvania), has modified its earlier procedure and methods. Since the committee's recent request to utility organizations, and others, for data on lobbying and publicity expenditures met with protests from many groups, including members of the House, Buchanan has turned the inquiry into channels which may reach conclusions on just what lobbying and lobbyists are. This, as distinguished from a probe into the political ideologies of those engaged in lobbying.

Buchanan greatly modified the original requests sent out, and extended the time for reply. He said the requests were for "information only," adding that if

the parties do not furnish such information, no contempt citation or other punitive action will be sought, although the committee on a 4-to-3 partisan vote gave the chairman authority to issue subpoenas. It was pointed out that some utility companies are complying with the committee's modified request, and the chairman has observed that one utility executive, who had outspokenly criticized the original questionnaire, may be among those first to comply. Apparently Buchanan would keep an overzealous left-wing staff from running the investigation into more difficulties.

WRPC Rules Out Private Company Session

THE President's Water Resources Policy Commission has declined to schedule a separate conference for the private operating electric companies. This was the reaction of WRPC Chairman Morris Llewellyn Cooke to the suggestion of the National Association of Electric Companies that a special conference be arranged in connection with the recent reply of the association to the queries made in WRPC's blanket questionnaire to the private companies for their views on Federal water resources development.

Cooke declared such a conference to be impracticable, because of the short time available in which WRPC must respond to the President's request—December 1st. "In no instance," he continued, "have we arranged for such a conference with a private interest," adding that "to establish a precedent of this kind" might lead the commission "far afield." He also suggested that the individual operating companies might well join regional conferences now being conducted in various cities.

As the WRPC regional hearings progress, all of the local testimony is perhaps not as the chairman would like it; namely, for a water resources development program entirely controlled by the Federal government. At the recent hearings in the Pacific Northwest, there was a strong plea for more "regional responsibility" in water development programs.

A joint bipartisan statement was presented at WRPC's Spokane, Washington, hearing on behalf of Governors Vail Pittman (Democrat, Nevada), Douglas McKay (Republican, Oregon), Arthur B. Langlie (Republican, Washington), John W. Bonner (Democrat, Montana), A. G. Crane (Democrat, Wyoming), and C. A. Robins (Republican, Idaho). The statement, delivered by Governor Robins, asked that all "federally built" water projects be turned over to local or state control after their costs have been returned to the Federal government.

The governors approved development of the Columbia basin through the joint program of the Army Corps of Engineers and the Bureau of Reclamation. Their statement did not contain reference to the proposed Columbia Valley Administration, a highly controversial issue in Pacific Northwest political circles. The governors also observed that state control of local water resources development should be subject only to Federal jurisdiction of navigation and international obligations, and that no Federal projects should be "forced."

Seymour Leaves Interior

THE resignation of Walton Seymour as director of Interior Department's division of power to join the Economic Coöperation Administration (Marshall Plan) as power adviser to the Greek mission with headquarters at Athens, Greece, removes from the Washington scene a zealous proponent of public power. He was also director of the department's program staff.

Secretary Oscar L. Chapman named Alfred C. Wolf as acting director of the program staff and Edward P. Eardley as acting director of the division of power, thus dividing the duties entirely carried by Seymour, who joined Interior in 1947 after seven years' service with the Tennessee Valley Authority.

Little is known of the philosophies of Wolf and Eardley, but it is assumed they,

like Seymour, are propublic power. The former has been a member of the program staff since October, 1947, and prior to that time served in a number of Federal alphabetical agencies, including the depression-inspired Works Progress Administration.

Eardley has been chief engineer of Interior's division of power since May, 1948. Prior to joining Interior, he was employed as representative of the Rural Electrification Administration in the Tennessee Valley Authority area from 1941 to 1946, and served as city manager of Burley, Idaho, in 1940.

The SWPA Contracts at Last?

As the Senate Appropriations Committee neared completion of its work on the House-approved Omnibus Appropriations Bill, Interior and the private utility representatives went into a near-marathon negotiating session that ended some days before the money bill was reported out to the Senate.

Senator Carl Hayden (Democrat, Arizona), chairman of the Interior Appropriations Subcommittee, was known to have wanted some kind of an agreement between the parties before his group gave final approval to the Interior portion of the bill.

During the closing days of the full committee's "mark-up" of the bill, there was some additional pressure to consider scaling down nonessential domestic spending in anticipation of increasing military needs.

Incidentally, the Korean situation is likely to make Congress less disposed to grant funds for Federal spending or lending on nonessential domestic programs. This would be especially true of long-range construction projects which might tie up strategic materials and man power during a critical period. In short, the sudden need for revitalizing our armed forces is quite likely to have some restrictive effect on public projects both as to appropriations and authorizations.

For the same reason the Senate is likely to kill any real tax reduction which would serve to cut the government's over-all revenues. House passage of a measure eliminating approximately $1 billion of excise levies can be regarded mostly as a political maneuver during a campaign year.

The time limit for the current session, tentatively scheduled for July 31st by administration leaders in Congress, is again up in the air. A longer session might have some effect on other pending legislation due to expire with an early adjournment. But the chances are that any extension of the session would be chiefly preoccupied with war needs.

Interior Spurned?

A COALITION of New England Rural Electrification Administration coöperatives has so far paid no attention to suggestions that the Interior Department might take on the pleasant responsibility of providing abundant low-cost hydro power from projected developments on the St. Lawrence and Niagara rivers.

A Yankee group, banded together to organize generating and transmission bodies to construct steam plants, already has prepared engineering plans for three or more plants and will soon seek REA financing to the extent of several million dollars. Eventual tie-ins with St. Lawrence-Niagara developments are eyed. Even Quoddy may have a place in the picture.

Interior officials are watching the New Englanders' plan closely, because it may yield an opportunity for creating a "Northeastern Power Administration" similar to Southwestern Power Administration and the Southeastern Power Administration.

Democratic high-command plans to attract New England votes with hydro power (see page 30, July 6th issue) assumed clearer outlines when a Senate Public Works Subcommittee recently held hearings on S 3707, a bill to establish a New England-New York Resources Survey Commission. Party strategists thus added to their stock of campaign material for use next fall.

Exchange Calls And Gossip

CWA Head Hits Dissidents

JOSEPH A. BEIRNE, president of the Communications Workers of America, CIO, lashed out at the union's fourth annual convention in Cleveland, Ohio, last month at dissident groups that he accused of conducting a "character assassination" campaign against himself and other top officers of the union.

Mr. Beirne opened the convention with a speech in which he defended his administration's handling of 1949-50 contract negotiations, denied responsibility for collapse of the union's nation-wide strike of 1947, and attacked groups "from within" that he said were spearheading "a mad move toward destruction of a union."

His harshest words were directed at leaders of a group that placed in circulation a petition calling for his and the executive board's recall from office. He told the 500 delegates that the recall petition was adopted at a membership meeting of Local 4463 of Division 20 at Hutchinson, Kansas, May 23rd. Maryland is another trouble spot, giving national leaders cause for concern because of the independent if not rebellious action of local union persons.

Apparently CWA may have suffered some internal structural damage as a result of the recent nation-wide strike threats which strained the framework of the organization. The situation recalls the experience of CWA's predecessor, the old independent National Federation of Telephone Workers, which almost went to pieces following its ill-fated strike of 1947. Primary object of the union's leadership and committees at the Cleveland meeting was stated as "streamlining union structure," which CWA officials described as "crucial to further progress and essential to greater cohesion" within the union.

CWA-CIO leaders were reported hopeful of developing the present loose federation into a well-knit union capable of carrying out national policies "as developed by convention action."

NARUC List of Rate Increases

A COMPREHENSIVE list of telephone rate increases since September, 1946, was issued recently by the National Association of Railroad and Utilities Commissioners. It itemizes, state by state, amounts of rate increases sought by Bell system companies, since the first postwar request was made up until June 10, 1950. Altogether, the state regulatory commissions have been asked to grant telephone rate increases aggregating $621,412,000, during the three and three-quarter-year period. Of this total, rate increases of $394,262,000 have been granted, while petitions amounting to some $98,984,000 are still pending. The largest was in Illinois where a $65,780,000 rate increase was requested, as compared with $49,063,000 granted. Although not computed by the NARUC on a percentage basis the amount of increases shown averaged 63 per cent of the total increases requested—with 16 per cent still pending.

Fourteen court reviews of the state commission rate orders in these Bell system cases were noted. They occurred in Alabama, Arizona, Georgia, Idaho, Kansas, Kentucky, Massachusetts, Mississippi, New Hampshire, Oklahoma, South Dakota, Tennessee, Vermont, and West Virginia. Only in West Virginia was

the telephone company's appeal for more favorable treatment by the state commission turned down.

In other words, telephone companies apparently succeeded, in whole or in part, in obtaining appellate relief at the hands of the courts in 13 (out of a total of 14) appeals taken from the state commission rate orders.

Largest REA Phone Loan Granted

THE largest REA rural telephone loan was made to a coöperative last month. The total amount of the loan authorized for Eastern New Mexico Rural Telephone Coöperative, Clovis, New Mexico, was $581,000. The telephone system proposed will include exchange facilities for 11 central office units with dial equipment. There is virtually no telephone service in the area at present.

This was said to be the third REA co-op telephone loan to be approved. But actually only two were on the books because REA withdrew a recent co-op loan in Iowa following announcement of Bell company service in the area.

Postal Service Compared with Bell System

ACTIVITIES of postal and other pressure groups in misrepresenting the effects of reductions in postal service were scored recently in a study prepared for the Council of State Chambers of Commerce. The study reviewed efforts to cut the half-billion-dollar Post Office Department deficit.

Referring to the readjustments ordered by Postmaster General Donaldson on April 17th in anticipation of a congressional cut in his department's appropriation, the council's study said: "These were minor reductions in services, some of them long recognized as overdue."

The study states that the Post Office Department is managed and operated as a government spending agency rather than as a business enterprise. Post Office officials, for example, have no knowledge whatever of the total value of the department's vast property holdings. By way of contrast, it says, it was a perfectly easy matter to ascertain that the value of all physical property owned by that other giant enterprise in the communications field—the privately owned and operated Bell telephone system—totals $9.5 billion.

Incidentally, Federal, state, and local taxes imposed on the Bell system in 1949 totaled $346,144,000—enough to pay the transportation costs (rail, air, etc.) of all domestic mails last year. In addition to this, the Bell system acted as agent for the government in collecting $445,000,000 in Federal excise taxes on telephone calls last year—this at negligible cost to Uncle Sam, the study states.

Commissioners Won't Quit

UNDER attack by both the Democratic administration and some members of the state legislature, Stuart B. White recently declared he had no intention of resigning from the Michigan Public Service Commission.

Governor Williams said a request for the resignation of White and Commissioner Schuyler L. Marshall, because of a $9,000,000 rate increase authorized for the Michigan Bell Telephone Company, was "within the realm of possibility."

Commissioner White said, "We worked on the case for weeks and considered all factors. I can't change my views in a 45-minute conference with someone who read only one brief."

The company had originally filed an application for a rate boost of $20,400,000 in December, 1948, and obtained an emergency increase of $4,800,000 last July. The company contended that the increased earnings were necessary to attract capital for necessary expansion. Commission majority estimates the new rates will yield a return of 6 per cent on investment.

Commissioner White has also protested against injecting politics into quasi judicial decisions. Pleading for more re-

pect for its regulatory processes, White pointed to the careful consideration of evidence and arguments by his commission. He staked his position on fair and reasonable decisions by an "independent" tribunal as opposed to political interference.

"The operations of Michigan Bell and other companies regulated by the commission are too important to the public to permit partisan consideration," White said. "This is an independent commission which should not be subjected to political pressure. The governor is attempting to stir up the people against this telephone increase, which we arrived at after careful judicial consideration of all the facts."

Senate Republicans, fearing the decision may have had some effect on the voters during an election year, have agreed to set up a special committee to consider the advisability of electing rather than appointing members of the commission, as well as to investigate its theories of rate making.

"Williams is using this [rate] increase for political purposes, and will make an issue of it in the campaign," said Senator Harry F. Hittle. "Utility rate decisions should be above politics. If our committee finds that the wrong rate-making theories are applied, we will do something about it."

Williams said that the commission majority opinion from which his own appointee, Chairman John H. McCarthy, dissented, caused him particular concern because of its alleged "disregard" of the commission's staff recommendations.

State Attorney General Stephen J. Roth was reported to be preparing a circuit court action to thwart the increase.

Renew Claims on Color TV

THREE companies which have developed color television systems last month renewed their claims to superiority in the field. Each, in effect, asked for an exclusive franchise if the Federal Communications Commission decides to license color for regular commercial video operation. A decision either for or against such operations is expected by late summer.

Columbia Broadcasting System and Color Television, Inc., of San Francisco, asked that their competitors be ruled out in the race for the expected multimillion-dollar patent royalties.

Radio Corporation of America suggested that the commission fix three basic tests for color and allow anyone who could meet them to go into the field. However, RCA said that it believed that its system alone could meet the three requirements.

CBS and RCA joined in asking the commission for prompt authority for color operation. CTI said its system is as ready as any of the others, but asserted that it would not object to a further development period before a commercial authorization is given. The San Francisco company expressed the view that the tests of various color plans thus far have been "inadequate finally to judge the merits of any proposed system."

Attacks Constitutionality of Antistrike Law

THE New Jersey Bell Telephone Company recently attacked the constitutionality of New Jersey's utility antistrike law, arguing it illegally delegates legislative power to arbitration boards to fix wages which are "indefinite, arbitrary, and oppressive." The company appealed to the appellate division of the state superior court to upset an arbitration board order of May 25th granting wage increases of $2.50 a week to 10,000 operators of the company.

F. Mark Garlinghouse, company counsel, told the court that the wage increases —which were being held up pending a decision of the appeal—would cause New Jersey operators to be the highest paid in the country. In the Camden area, he said, the wording of the arbitration award would result in operators getting a $3.50 weekly wage increase. That, he said, would bring wages far above the average in near-by Philadelphia.

Financial News and Comment

By OWEN ELY

The Issue over Public Power

THE issue of "public *versus* private power" has recently made many headlines and much editorial comment in the nation's press. Not only the Edison Electric Institute and the National Association of Electric Companies but also the Hoover Commission, the U. S. Chamber of Commerce, and more recently the Engineers Joint Council (representing the country's five major engineering societies) have recorded their views or suggestions. The objectives generally desired are: (1) curtailment of grandiose government hydro plans and propaganda, (2) closer coördination of government and private plans to expand power facilities, and (3) clarification of ideas about "cheap hydro power" now obscured by misleading cost allocations in multipurpose projects and by hidden subsidies due to tax-free financing and operation. While the issue has many facets and there are innumerable plans and problems in different sections of the country, a brief reëxamination of the over-all situation from the investor's viewpoint may be of value, because of its importance in relation to private utilities' finance programs, and the effects on investors' confidence. First let us take a look at the major issues and later at the geographical picture.

1. *The Huge Federal Program—Is It Needed or Practicable?* Granted that big hydro developments such as TVA, Bonneville, Coulee, Niagara, etc., have proved a valuable adjunct to national defense and an aid in the refining of refractory light metal ores—has this had effect of overstimulating Federal hydro? Power shortages during the war were temporary and in some cases merely the imaginary product of political expediency.

The Federal agencies now seem to be overdoing their *secondary* hydro programs—proposing to produce electricity inefficiently in big multipurpose projects, or to develop many smaller hydro sites which may prove infeasible or uneconomical. In 1933 there were only 11 federally financed hydro plants operating, and one under construction. While estimates differ, there are now said to be in service, under construction, or proposed by Federal agencies, some 625 hydro projects. These would have a potential generating capacity estimated at nearly 46,000,000 kilowatts, compared with only 6,000,000 kilowatts Federal power in actual service at the end of 1949 (and a total of 62,000,000 kilowatts, public and private).

The cost (including amounts for flood control, irrigation, etc.) has been estimated at some $35-$40 billion, or two to

DEPARTMENT INDEX

three times the present plant investment of all the private utilities. Annual government expenditures for Federal power and water research projects are now approaching the billion dollar level, compared with only $56,000,000 in 1932 (when such expenditures would have been far more worth while from the viewpoint of providing employment).

Can all of these projects be economically justified, taking into account the need for stand-by steam facilities in many cases? Is there an adequate market in each case, which can't be better supplied by a private utility company in the area? Certainly the best of the big sites, suitable for metal working facilities, have been pretty well exploited, with the exception of Niagara river. It is even a fair question to ask whether much of this new planning has been done on the theory that *any and all* hydro plants are politically desirable, regardless of cost and efficiency, because they will expand the Federal government's sphere of activity.

2. *Must Private Utilities Relinquish Hydro Rights?* Where private utilities already are planning to build hydro developments, under FPC license, is it proper for other Federal agencies to try to have these projects disapproved or postponed, on the plea that the Federal government may wish to do the job at some later date? Two cases are currently in the record.

Virginia Electric & Power Company wants to construct a hydro plant at Roanoke Rapids, North Carolina, and sometime ago an FPC examiner approved the application. However, the Interior Department claims that the whole Roanoke valley watershed has been earmarked for Federal development under broad plans drawn up by Army Engineers. Pacific Gas and Electric Company was authorized by the FPC last November to build three hydro plants on Kings river in California. Here again the Interior Department has stepped in, demanding that proceedings be reopened because this river is embraced in the big Central Valley project. Considering recent appointments to the FPC, it seems possible that political considerations may influence the final decision. As *The Wall Street Journal* states, "it is the clear duty of Congress to declare the national policy in this field."

3. *Must Federal Hydro Projects Be Supported by Steam Plants?* Until recently, there was no suggestion that the Federal government should build steam plants. This would greatly increase the Federal costs where hydro power is seasonal or erratic as might be the case with much of the proposed big program. This issue has been widely debated in connection with the demands of TVA for $100,000,000 for steam facilities. At present most hydro projects, both public and private, pool their power through wide interconnections with a vast amount of regular and stand-by steam power. The private utilities are now increasing their proportion of reserve capacity to around 15-20 per cent—one large company now has about 50 per cent margin. Wartime experience proved the tremendous benefits obtainable from linking up power facilities over a large area, with a central load dispatching system. The government, by building steam plants on a wide scale, would considerably increase the over-all margin of unused capacity, and make it difficult for the private utilities to plan and finance their programs.

4. *Should the Federal Government Ignore Expansion Plans of Private Utilities?* There should be a closer coördination of public and private long-range plans for power development. In general, it seems to be the practice of Federal planning agencies to ignore any long-range private plans and to assume that private plants as they become obsolete will not be replaced.

For example, a chart prepared in connection with estimates of future power requirements in the Missouri valley territory assumed a rapid decline in existing facilities as they become worn out in future years. Yet Union Electric of Missouri, the largest private utility in this area, has for several years publicized its intentions to spend about $400,000,000

in a broad, long-range program of power development—which plan would seem to be ignored in the chart. Similarly, it has been assumed that in New England private generating capacity will be allowed to deteriorate.

5. *How Does the REA Loan Policy Fit into This Picture?* The big fight over TVA in the 1930's was whether the authority should compete with private utilities in the retailing of power, by building a parallel network of transmission lines. After being dormant for many years the issue has now been revived in the Carolinas. The REA in Washington has approved a loan of about $7,600,000 to the Central Electric Power Coöperative, a holding company for some 14 local co-ops in South Carolina, for the construction of transmission lines which will parallel those of the South Carolina Electric & Gas Company. The Santee-Cooper project, a federally financed hydroelectric enterprise operated by the state, has agreed to supply power and maintain the system. Thus three kinds of public power agencies are in league against a private utility.

It has long been the established statutory policy for Federal power projects to give preference to REA co-ops, municipalities, etc., in the distribution of hydro power. Of course, this may not be true with respect to some of the older contractual arrangements. But there is no doubt that this policy is being practiced at the newer projects with resulting detriment to the private utilities in the area. The tendency of Federal projects to favor public distributors and retailers will upset this system. If private companies should refuse to sell power to co-ops on a reasonable basis, the government would have a good case against them, but the utilities are usually willing to coöperate on a reasonable profit basis.

6. *Should Government Bookkeeping Be Revised?* TVA accounting has been repeatedly attacked because of the diversion of much of the cost overhead to other activities, thus increasing the apparent profit from production of electricity. Even the U. S. Comptroller General has criticized this accounting. TVA charges for interest on funds borrowed from the U. S. Treasury have been questioned. Why should not Congress authorize the Comptroller General to lay down exact rules for public power projects, with respect to allocation of expenses between various functions?

7. *The Issue over Taxes* is perhaps the most vital of all. It is quite apparent to all students, but not always to the public, that the 3-pronged tax advantage enjoyed by public power—(1) borrowing 100 per cent instead of 50 per cent of funds, (2) obtaining low money rates because interest is tax free, and (3) avoiding payment of Federal income taxes—gives them a great advantage over the private utilities with respect to the cost of generating power. Whether or not these tax advantages can be modified by congressional action seems problematical. At any rate government propaganda for public power should be required to make full allowance for the three advantages, in comparing rates and earnings of public *versus* private projects.

As to the issue by regional area setup, we find the following:

New England—Electric rates in this area must be based upon the greater cost of transporting coal and oil, plus heavy transmission lines to withstand climatic rigors, and high property taxes and labor costs. While production and tax costs are 5-10 cents higher than in the Southeast, the selling price of electricity is only 3-10 cents higher. As an author in this magazine recently demonstrated,[1] nobody has yet been able to prove that high electric costs have caused industries to leave New England; except for special metallurgical plants, power costs are secondary to such factors as taxes, freight, labor, etc.

Recent Federal propaganda has urged the need of developing all possible

[1] "What Makes Industry Change Its Address?" By J. A. Whitlow. PUBLIC UTILITIES FORTNIGHTLY, July 6, 1950.

hydro power in New England by public agencies. But Maine, with about half the power resources in New England, does not permit exporting any power. The experience of private New England companies with their hydro plants in recent years has demonstrated the necessity of having substantial steam stand-by facilities. The FPC contends that 3,000,000 kilowatts of hydro power are available, but the New England Council puts the figure at only 500,000 kilowatts. While it is not clear why the figures vary so widely, it is suspected that the FPC figure could only be attained by building huge dams of tremendous height. Because there is so much flat terrain, critics say this would mean flooding a great number of sizable communities. It is also said that New England (without Federal help) has actually developed its water power to a greater degree than any other section of the country, excepting Washington, Tennessee, and New York.

There has also been talk of reviving the Passamaquoddy tidal project, on which the government spent $7,000,000 (including model villages) before the project was abandoned in 1936. The FPC, however, has decided that this would be impracticable.

NIAGARA POWER—While it is doubtful whether the Senate will ratify the proposed treaty with Canada at this session, it appears likely that it will eventually be approved. A 3-way fight has developed as to whether a Federal agency, the New York Power Authority, or Niagara Mohawk Power Company shall build the hydro plants. Bills for the construction of a $300,000,000 public power development at Niagara Falls, with New York state as the ultimate owner and operator, were introduced by Senator Lehman and Representative Roosevelt on May 3rd, and the question is also before the FPC. But Niagara Mohawk Power Corporation now owns substantially all the practicable sites on the American side of the Niagara river. The company favors ratification of the treaty and expects to ask the FPC to grant it a license to develop and operate all the available power sites. With the plant in operation, the company would pay about $23,000,000 a year in taxes.

SOUTHEAST—There seems to be considerable difference of opinion in the northern and southern segments of this area. In the Virginias and Carolinas quite a fight has developed recently between Washington and the private utilities, while in Georgia and other southern territory relations are much more harmonious. President Spurr of Monongahela Power Company in West Virginia claims that the Federal government is welding a public power chain that threatens to choke off more than twenty large utility companies in an 18-state area in the South. The Southeastern Power Authority was created last year, with an initial grant of only $70,000. At the January, 1950, hearings a government expert estimated that annual revenues would reach $10,000,000 by 1954, while operating expenses would be around $250,000. SEPA theoretically covers 11 states from Maryland to Florida, reaching to the border of TVA, which in turn links up the Southwestern Power Authority (SWPA) in seven states.

Another development in this area was the recent loan by the REA in Washington, to permit co-ops to build a transmission line. President S. C. McMeekin of South Carolina Electric & Gas Company has been building a public opinion fire under this, with full-page advertisements for some time.

In one of these ads, he stated:

> Specifically, more than 800 miles of existing transmission lines of the system which my company operates are about to be duplicated. The result may well be to force us out of business. . . . In the territory in which my company operates, *all the areas where REA proposes to build these lines now have full service at low cost*. . . . Furthermore, the rates which we now charge co-ops using our power are 10 per cent lower than they would have to pay for electricity on the proposed new lines. . . . We can't get any government official to heed our story.

Down in Georgia, however, C. B. McManus, president of Georgia Power Company and the parent Southern Company, seems to get along with the public power agencies. The system has coöperated with TVA in the interchange of power, since the historic fight between TVA and Wendell Willkie was settled. Mr. McManus was recently quoted as stating, "if a utility company can't build these power projects, let the government do so, and we'll buy all the electricity." Georgia Power is either buying or proposes to buy the 86,000-kilowatt hydro output at Buford, 108,000 kilowatts from Allatoona dam, 280,000 kilowatts at Clark's Hill dam, and 30,000 kilowatts at the Jim Woodruff dam. Some of this power is bought from the government for 6.5 mills and resold to REA co-ops at 6.8 mills. As far back as 1936, Georgia Power admitted that it could not build all the rural lines needed in the state and, accordingly, that it would help the REA to extend service; the company has even helped local groups to organize and apply for REA loans.

The Southwest—In so-called southwestern territory there is also some difference of opinion among utility executives. Some of them are greatly concerned over the efforts of SWPA to obtain special funds from Congress for encroachments in the transmission and wholesaling of power. The following is summarized from a recent talk by President Frank Wilkes of Southwestern Gas & Electric, who has been active in the negotiations with SWPA:

A large part of the area served by the company and adjoining utilities is characterized by periodical heavy rainfall and "flash floods" which necessitate Federal flood control. Studies by Army Engineers stressed the need to conserve costs in such a program by building multipurpose dams throughout the area. In their reports, the Engineers suggested contracts between the Power Administration and the private utilities, naming these companies specifically. The problem of making contracts for power distribution was turned over to the Interior Department which has been consistently critical of the industry point of view. The department proposed to use the numerous REA's in this area as the basis for building stand-by steam plants and extensive transmission facilities, so as to permit the REA's to compete with the private utilities in the retailing of power.

Two Oklahoma companies started negotiations in December, and seven other companies in January. However, Mr. Wilkes was dubious as to whether, unless forced by Congress, the Interior Department would sign any contracts, because of the political angle. After much wrangling some contracts were nearing agreement early in July.

President "Ham" Moses of Arkansas Power & Light recently took a more favorable view of SWPA, claiming that it benefited the entire economy in the area, including the private utilities as members of the Southwest power pool. While a number of local rural coöperatives have been approached for contracts to buy power directly from SWPA, Mr. Moses and other private power officials have pointed out to the co-ops that they can buy just as cheaply from the private utilities, that all SWPA power is pooled anyway, and that it is unnecessary to duplicate existing transmission lines. Latest reports indicate that, under pressure of the international crisis, Congress will force the Interior Department to get together with the private power companies on contracts for the distribution of SWPA power, which will ease the situation.

Missouri Valley—The over-all cost of the huge project in the Missouri river basin, as now loosely planned, has been estimated at about \$8.5 billion Federal funds and \$5 billion in private money. The administration wants a big authority set up to run the whole job. Flood-control needs in this area should be considered paramount, and care should be taken to prevent power from becoming the dominant factor, since projects for flood control are frequently diametrically opposed to power efficiency, with respect to location and size of dams, etc. As stated

above, the private utilities in this area have not been lagging in their plans to maintain an ample supply of power. To build vast Federal hydro projects under the guise of irrigation and flood-control needs, and on the assumption that private utilities will quit building, would clearly be unwarranted and tremendously wasteful. Moreover, the rights of the states to control water for domestic, sanitation, and sewerage needs should not be encroached upon. The Missouri Basin Inter-Agency Committee, a voluntary group, is seeking to coördinate the work of five Federal agencies and the various state agencies. It is perhaps doing a good job in this respect, but the program is not geared closely enough to the plans of the private utilities.

The Interior Department Appropriation Bill for 1951 provides about $4.3 billion for immediate MVA development, of which $600,000,000 would be for power and the balance for flood control, navigation, irrigation, etc. Of this the cost allocated to irrigation, to be returned from power revenues, would be about $2 billion. The actual cost of power produced at the flood-control dams is expected to be 2¼ mills per kilowatt hour, but it will be sold at 5 mills to subsidize irrigation, it was reported.

THE NORTHWEST—The Northwest is rapidly becoming the most important hydro area, surpassing TVA, with the huge developments at Bonneville, Grand Coulee, Fort Peck, Hungry Horse, etc. Grand Coulee, originally proposed under the Hoover régime, has been under development since 1933 and now produces over 1,400,000 kilowatts. By 1952 the big overflow will be used for irrigation without sacrificing electric output.

The Northwest has reportedly become the headquarters for light metal production. Fourteen electro-process industries have moved into the region, and 16 more have bought factory sites and are awaiting power facilities. Government engineers have spotted 257 more hydro dam sites on the Columbia and its tributaries; 21 have some kind of authorization and 7 are under construction. Twenty different government agencies have had a hand in this program and several of them are in competition with each other (the Bureau of Reclamation, the Army Engineers, and Bonneville). The Bonneville-Grand Coulee grid is being expanded to include such private utilities as Montana Power, California-Oregon Power. By the end of 1955 about 2,000,000 kilowatts of hydro power may be added to the present 2,000,000.

President Truman, in his talk at Grand Coulee, called for "new efforts to combat the private power lobby and other people who have selfish interests against developments such as the MVA and CVA." The proposed huge Columbia Valley Authority would supervise and administer the $6-$8 billion program in the Northwest. Because of the wide overlapping and duplication of effort among the many agencies now involved, some coördinating organization appears desirable. But the vast powers assigned to CVA under bills presented to Congress, including the complete subordination of local political rights, make it necessary to devise new proposals which are less arbitrary. Most of the private utilities already are pretty well integrated with public power through a power pool. Dismemberment of the Puget Sound Power & Light system is already in sight.

CALIFORNIA — There have long been differences between Pacific Gas and Electric Company, biggest western utility, and the Interior Department over Hetch Hetchy and Central Valley, details of which can be studied in prospectuses on security offerings. Pacific Gas, despite political charges of a wartime power shortage which was aggravated by bad water conditions, has under way the largest construction program of any United States utility. This includes a considerable amount of hydro power; the 200,000-kilowatt Feather river project was recently dedicated. In the meantime the Federal government has been busy with the development of the big Central Valley project and other hydro plans. The Shasta multipurpose dam, at the northern end of the Central Valley, was re-

cently dedicated; Shasta and Keswick dams will generate 450,000 kilowatts, and Congress is being asked for funds to build another 113,000 kilowatts.

William E. Warne, Assistant Secretary of the Interior, has attacked private industry opposition to construction of Federal transmission lines, steam plants, and other facilities. Another source of friction is the Interior Department's attempt to claim jurisdiction (before the FPC) over certain hydro sites which the company has actively planned to develop. FPC will doubtless settle this soon.

FINANCIAL DATA ON DIVIDEND-PAYING ELECTRIC UTILITY STOCKS

		6/27/50 Price About	Indicated Dividend Rate	Approx. Yield	Share Earnings — Cur. Period	Share Earnings — Prev. Period	Share Earnings — % Increase	Price-Earn. Ratio	% of Rev. Avail. For Com. Stock
	Revenues $50,000,000 or over								
S	American Gas & Elec.	50	$3.00	6.0%	$4.22a	$4.08	3%	11.8	—
B	Boston Edison	48	2.80	5.8	2.95m	2.78	6	16.3	11%
S	Central & South West	14	.90	6.4	1.45m	1.27	14	9.7	—
S	Cincinnati G. & E.	32	1.80	5.6	2.82m	2.49	13	11.3	14
S	Cleveland Elec. Illum.	45	2.40	5.3	3.12m	2.55	22	14.4	12
S	Commonwealth Edison	31	1.60	5.2	2.03a	—	—	15.3	12
S	Consol. Edison of N.Y.	30	1.60	5.3	2.47m	2.04	21	12.1	7
S	Consol. Gas of Balt.	27	1.40	5.2	1.75m	1.48	18	15.4	10
S	Consumers Power	34	2.00	5.9	2.80my	2.24	25	12.1	13
S	Detroit Edison	24	1.20	5.0	1.96my	1.57	25	12.2	10
C	Duke Power	98	4.00	4.1	8.79m	6.59	33	11.1	15
S	General Pub. Util.	16	1.00	6.3	2.07m	1.61	29	7.7	—
S	Middle South Util.	17	1.10	6.5	1.63my	—	—	10.4	—
S	New England El. System ..	12	.80	6.7	130d	.98	32	9.2	—
S	Niagara Mohawk Power ...	22	1.40	6.4	2.08m	1.67	25	10.6	—
S	North American	19	1.20	6.3	1.40m	—	—	13.6	—
S	Northern States Power	11	.70	6.4	1.05m	.82	28	10.5	15
S	Ohio Edison	33	2.00	6.1	3.12my	2.81	11	10.6	15
S	Pacific G. & E.	33	2.00	6.1	†2.19m	1.64	34	15.1	8
S	Penn Power & Light	25	1.60	6.4	2.44a	1.96	24	10.2	10
S	Philadelphia Elec.	25	1.20	4.8	2.01m	1.70	18	12.4	13
S	Pub. Serv. E. & G.	24	1.60	6.7	2.25d	2.13	6	10.7	7
S	So. Calif. Edison	34	2.00	5.9	3.19m	2.05	56	10.7	13
S	Southern Co.	11	.80	7.3	1.21my	.95	28	9.1	—
O	Texas Utilities	24	1.28	5.3	2.23my	1.76	27	10.8	—
S	Virginia Elec. & Power ...	20	1.20	6.0	1.64my	1.10	49	12.2	12
S	West Penn Elec.	25	1.80	7.2	3.12m	3.33	D6	8.0	—
S	Wisconsin Elec. Pr.	20	1.20	6.0	1.73m	1.49	16	11.6	9
	Averages			5.9%				11.6	
	Revenues $25-$50,000,000								
S	Carolina P. & L.	31	$2.00	6.5%	$3.06my	$2.48	23%	10.1	14%
O	Central Ill. P. S.	16	1.20	7.5	1.57m	1.47	7	10.2	15
O	Connecticut L. & P.	62	3.00	4.8	3.77my	3.62	4	16.4	13
S	Dayton P. & L.	32	2.00	6.3	2.61m	2.06	27	12.3	15
S	Florida P. & L.	20	1.20	6.0	2.22m	1.98	12	9.0	13
S	Gulf States Util.	22	1.20	5.5	1.74a	1.51	15	12.6	19
S	Houston L. & P.	54	2.20	4.1	3.96my	—	—	13.6	18
S	Indianapolis P. & L.	32	1.60	5.0	2.78m	3.01	D8	11.5	14
S	Illinois Power	39	2.20	5.6	3.09my	2.95	5	12.6	16
O	Kansas City P. & L.	27	1.60	5.9	2.04my	1.93	6	13.2	13
C	Long Island Lighting	13WD	.80Est.	6.2	1.15m	1.03	12	11.3	—
S	Louisville G. & E.	35	1.80	5.1	3.10m	2.90	7	11.3	13
O	New England G. & E.	14	.93	6.6	1.45my	1.21	20	9.7	—
O	New Orleans Pub. Ser. ...	37	2.25	6.1	2.95f	2.90	2	12.5	8
S	N. Y. State E. & G.	27	1.70	6.3	2.13my	1.86	15	12.7	9
O	Northern Ind. P. S.	19	1.40	7.4	2.05my	1.70	21	9.3	12

(Continued)		6/27/50 Price About	Indicated Dividend Rate	Approx. Yield	Share Earnings Cur. Period	Share Earnings Prev. Period	% Increase	Price-Earn. Ratio	% of Rev. Avail. For Com. Stock
S	Potomac Elec. Power	15	.90	6.0	1.11m	1.02	9	13.5	11
S	Pub. Serv. of Colo.	27	1.40	5.2	2.30m	2.08	11	11.7	14
S	Pub. Serv. of Ind.	28	1.80	6.4	2.49a	2.36	6	11.2	17
O	Puget Sound P. & L.	16	.80	5.0	1.80a	1.56	15	8.9	13
O	Rochester G. & E.	34	2.24	6.6	2.28d	2.42	D6	14.9	8
O	Toledo Edison	10½	.70	6.7	.87j	—	—	12.1	18
O	West Penn Power	32	1.80	5.6	1.94m	2.11	D8	16.5	15
	Averages			5.9%				12.0	

Revenues $10-$25,000,000

S	Atlantic City Elec.	20	$1.20	6.0%	$1.58my	$1.47	7%	12.7	11%
S	Birmingham Elec.	16	—	—	1.56a	2.38	D34	10.3	4
C	California Elec. Pr.	8	.60	7.5	.83m	.61	36	9.6	12
O	Calif. Oregon Power	23	1.60	7.0	2.14my	2.12	1	10.7	17
O	Central Ariz. L. & P.	12	.80	6.7	1.03my	1.12	D8	11.7	12
S	Central Hudson G. & E. ...	10	.60	6.0	.70m	.61	15	14.3	7
O	Central Ill. E. & G.	21	1.30	6.2	2.61m	2.14	22	8.0	11
S	Central Illinois Lt.	35	2.20	6.3	3.08my	2.98	3	11.4	13
O	Central Maine Power	17	1.20	7.1	1.53my	1.46	5	11.1	16
S	Columbus & S. Ohio El. ..	21	1.40	6.7	2.23m	2.04	9	9.4	14
O	Connecticut Power	35	2.25	6.4	2.30d	1.93	19	15.2	12
S	Delaware P. & L.	23	1.20	5.2	1.69m	1.51	12	13.6	14
S	Florida Power Corp.	17	1.20	7.1	1.65m	1.37	20	10.3	12
C	Hartford Elec. Light	52	2.75	5.3	2.86d	2.77	3	18.2	15
S	Idaho Power	36	1.80	5.0	2.94m	2.50	18	12.2	19
O	Interstate Power	8	.60	7.5	.89m	.89	—	9.0	13
O	Iowa Electric L. & P.	13	.90	6.9	1.39my	1.20	16	9.4	9
O	Iowa Pub. Serv.	21	1.20	5.7	2.39my	1.91	25	8.8	15
C	Iowa-Illinois G. & E.	27WD	1.80	6.7	2.69m	2.54	6	10.0	25
C	Iowa Power & Light	21WD	1.40	6.7	1.83m	1.58	16	11.5	15
O	Kansas Gas & Elec.	32	2.00	6.3	3.31my	2.42	37	9.7	18
S	Kansas Power & Light	17	1.12	6.6	1.62m	1.50	8	10.5	13
O	Kentucky Utilities	14	.80	5.7	1.43a	—	—	9.8	13
S	Minnesota P. & L.	30	2.20	7.3	3.99my	3.03	32	7.5	17
S	Montana Power	23	1.40	6.1	2.65a	2.26	17	8.7	26
C	Mountain States Power ...	32	2.50	7.8	3.70a	—	—	8.6	10
O	Oklahoma G. & E.	42	2.50	6.0	3.46a	3.05	13	12.1	14
O	Otter Tail Power	20	1.50	7.5	1.76my	—	—	11.4	9
O	Portland Gen. Elec.	26	1.80	6.9	2.63my	1.61	63	9.9	12
O	Pub. Ser. of N. H.	25	1.80	7.2	1.99my	1.65	21	12.6	14
O	San Diego G. & E.	14	.80	5.7	1.13a	.64	77	12.4	11
S	Scranton Elec.	14	1.00	7.1	1.19a	1.08	10	11.8	15
S	So. Carolina E. & G.	9	.60	6.7	1.07m	.84	27	8.4	11
O	Southwestern Pub. Serv. ..	33	2.20	6.7	2.65my	2.35	13	12.5	22
C	Tampa Electric	35	2.00	5.7	3.19a	2.26	41	11.0	19
O	United Illum.	43	2.25	5.2	2.69d	2.53	6	16.0	17
C	Utah Power & Light	25	1.80	7.2	2.58my	2.44	6	9.7	16
O	Western Mass. Cos.	33	2.00	6.1	2.64d	2.30	15	12.5	15
O	Wisconsin P. & L.	17	1.12	6.6	1.52m	1.02	38	11.2	12
	Averages			6.5%				11.1	

Revenues $5-$10,000,000

O	Central Vermont P. S.	10	$ .68	6.8%	$ .92my	$ .64	44%	10.9	7%
C	Community Pub. Ser.	15	.90	6.0	1.37m	1.33	3	10.9	12
O	El Paso Electric	35	2.00	5.7	3.32a	3.09	7	10.5	22
S	Empire Dist. Elec.	19	1.24	6.5	2.33m	1.57	48	8.2	13
O	Gulf Public Service	12	.80	6.7	1.42a	1.36	4	8.5	13
O	Iowa Southern Util.	17	1.20	7.1	1.90my	1.85	3	8.9	11
O	Lawrence G. & E.	36	2.85	7.9	2.92d	2.41	21	12.3	10
O	Lynn G. & E.	85	5.00	5.9	4.85d	5.02	D3	17.5	12
O	Madison Gas & Elec.	29	1.60	5.5	1.89d	1.64	15	15.3	13

	(Continued)	6/27/50 Price About	Indicated Dividend Rate	Approx. Yield	Share Earnings Cur. Period	Share Earnings Prev. Period	% Increase	Price-Earn. Ratio	% of Rev. Avail. For Com. Stock
O	Northwestern P. S.	10	.80	8.0	1.30m	1.30	—	7.7	9
C	Penn Water & Power	34	2.00	5.9	2.12d	4.80	D56	16.0	13
O	Public Ser. of New Mexico	17	1.00	5.9	1.44m	1.51	D5	11.8	14
O	Rockland L. & P.	9	.60	6.7	.63m	.64	—	14.3	13
C	St. Joseph Light & Pr. ...	24WD	1.50	6.3	1.90d	1.54	23	12.6	11
S	Southern Ind. G. & E.	22	1.50	6.8	2.15my	2.16	—	10.2	15
O	Tide Water Power	9	.60	6.7	1.05my	.83	28	8.6	9
O	Western Lt. & Tel.	26	2.00	7.7	2.24m	2.20	2	11.6	11
	Averages			6.6%				11.5	

Revenues under $5,000,000

		Price About	Dividend Rate	Approx. Yield	Cur. Period	Prev. Period	% Increase	Price-Earn. Ratio	% of Rev. Avail. For Com. Stock
O	Arizona Edison	19	$1.20	6.3%	$1.97m	$1.98	—	9.6	10%
O	Arkansas Missouri P.	13	1.00	7.7	1.89m	2.10	D10%	6.9	10
O	Bangor Hydro Elec.	28	1.60	5.7	2.66d	2.39	11	10.5	15
O	Beverley G. & E.	44	2.75	6.3	3.16d	2.10	50	13.9	8
O	Black Hills P. & L.	18	1.28	7.1	1.96a	1.55	26	9.2	14
O	Calif. Pacific Util.	33	2.40	7.3	4.31a	3.85	12	7.7	7
O	Central Louisiana El.	34	1.80	5.3	3.91m	3.44	14	8.7	22
O	Central Ohio L. & P.	33	1.80	5.5	2.83m	2.34	21	11.7	11
O	Citizens Utilities	13	.70&Stk.	5.4	1.96m	1.76	11	6.6	13
O	Colorado Central P.	31	1.80	5.8	2.56m	2.03	26	12.1	13
O	Concord Electric	37	2.40	6.5	2.57d	2.17	18	14.4	12
O	Derby G. & E.	21	1.40	6.7	1.92d	1.19	61	10.9	10
O	Fall River Elec. Lt.	62	3.60	5.8	4.26d	3.55	20	14.6	20
O	Fitchburg G. & E.	46	2.75	6.0	2.78d	2.68	4	16.5	12
O	Frontier Power	4	.40	10.0	.84d	1.14	D26	4.8	10
O	Haverhill Elec.	36	3.00	8.3	2.80d	1.10	155	12.9	11
O	Lake Superior Dist. P.	25	1.60	6.4	3.11m	1.03	202	8.0	13
O	Lowell Elec. Lt.	44	3.40	7.7	3.35d	2.36	42	13.1	10
C	Maine Public Service	13	1.00	7.7	1.51a	1.35	12	8.6	13
O	Michigan Gas & Elec.	24	1.60	6.7	2.19m	1.82	20	11.0	10
O	Michigan Public Ser.	13	.90	6.9	1.40m	.98	43	9.3	11
O	Missouri Edison	9	.70	7.8	1.15m	.87	32	7.8	9
C	Missouri Public Ser.	42	2.40	5.7	4.40d	3.92	12	9.5	14
O	Missouri Utilities	15	1.00	6.7	1.80m	1.55	16	8.3	13
O	Newport Electric	28	1.80	6.4	3.04my	2.45	24	9.2	13
O	Sierra Pac. Power	23	1.60	7.0	2.18a	2.05	6	10.6	11
O	Southern Colo. Pr.	9	.70	7.8	.88m	.86	2	10.2	17
O	Southwestern El. Ser.	12	.80	6.7	1.38my	1.36	1	8.7	14
O	Tucson Gas, E. L. & P. ...	22	1.40	6.4	2.23m	2.06	8	9.4	17
O	Upper Peninsula Power ...	14	1.20	8.6	1.59m	1.09	46	8.8	8
	Averages			6.8%				10.1	
	Averages, five groups ..			6.4%				11.2	

Canadian Companies**

		Price About	Dividend Rate	Approx. Yield	Cur. Period	Prev. Period	% Increase	Price-Earn. Ratio	% of Rev. Avail. For Com. Stock
C	Brazilian Trac. L. & P. ...	21	$2.00	9.5%	$3.85d	$3.69	4%	5.5	—
C	Gatineau Power	17	1.20	7.1	1.43d	1.26	13	11.9	—
C	Quebec Power	19	1.00	5.3	1.14d	1.21	D6	16.7	—
C	Shawinigan Power	25	1.20	4.8	1.43d	1.58	D9	17.5	—
C	Winnipeg Electric	35	1.50	4.3	2.53d	1.81	40	13.8	—

d—December. j—January. f—February. m—March. a—April. my—May. B—Boston Exchange. C—Curb Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. E—Estimated. WD—When delivered. *All twelve months' earnings comparisons have been adjusted to reflect in both periods the present number of shares outstanding. If additional common shares are offered, all earnings are adjusted to give effect to the offering. **While these stocks are listed on the Curb, Canadian prices are used. †Does not fully reflect $4,000,000 gas rate increase effective November 28, 1949, or electric rate increase of $8,800,000 recently granted. Earnings on *average* shares outstanding, $2.63; price-earnings ratio on this basis 12.5.

What Others Think

Atomic Energy Power Prospects

HARRY A. WINNE, vice president, General Electric Company, recently gave a Rotary meeting in Detroit a down-to-earth explanation of atomic energy applications at the present time. His remarks in the main covered possible uses of atomic energy in power development, but also gave a well-rounded picture of other present-time applications which would be of universal benefit.

Winne began his discussion of these uses by implying to his audience that the theory of atomic energy was not altogether too astounding when it is compared with everyday energy reactions. He noted that some writers and speakers implied that atomic energy will provide free electric power, release us from toil, and cure all ills. Others have stressed it as being a force for evil, released to the human race, too immature to know how to handle it.

Winne stated that neither of these extremes is realistic.

The speaker then cited the fact that we do not need to be scientists in order to understand how to use, control, and protect ourselves against fire—yet the complicated chemical reactions which take place in the burning of coal or wood are not easily grasped by the layman. Winne carried this coal-burning example into an explanation of the release of energy in atomic fission. He stated that since it has been proved that matter, or mass, can be converted into energy, when we burn coal (a combining of the coal with the oxygen in the air) we convert "an infinitesimal part" of the mass of coal and air into heat; namely, one ten-billionth of the mass.

In an atomic reaction, on the other hand, a much larger portion of the mass is converted to energy—about one one-thousandth. This is possible only because it has been found that uranium is susceptible to a process known as chain-reacting atomic, or nuclear, fission.

THE speaker further emphasized his point with this interesting comparison: If we split all the atoms in a pound of uranium-235, we can release as much heat as if we would burn about 2,500,000 pounds of coal.

Winne then went on to show the difference between the two reactions—atom splitting and coal combustion. In the combustion of coal we get energy by combining atoms of carbon with atoms of oxygen. In atomic fission the reaction is one of breaking an atom into two parts with an accompanying release of energy, which appears as heat. Both of the reactions are chain reactions.

Some of the important differences between combustion and fission are as follows: In combustion, *some* of the *heat* released must be used to keep the chain reaction going. As an example one burning lump of coal heats some other lumps to a temperature to which they will combine with oxygen and release more heat, and so on. In a fission chain reaction the heat released is a by-product and is not necessary to a continuation of the process. The agent here consists of the tiny smaller-than-atom particles known as neutrons, which can cause atoms to split and new ones released from splitting atoms which go to perform the same splitting operation. Thus the chain reaction. It is again emphasized that the heat released is a by-product and not necessary to the continuation of the reaction.

The GE executive told his audience that this was an oversimplification of the process but fundamentally described the basic reaction. He then went on to inform his listeners that this simple-sound-

ing process occurs only under very, very special conditions:

1. To begin with, there is only one element occurring in nature, uranium, which will sustain this kind of chain reaction.

2. More than that, only one particular type of that element, a type which constitutes only one-one hundred fortieth part of all natural uranium is usable in this way.

3. This chain reaction will take place with this element only under carefully controlled conditions, with the right amount of uranium arranged in peculiar assembly. This assembly is termed an atomic pile, or a nuclear reactor.

WINNE then went on to describe this peculiar assembly or atomic pile. Since during the reaction deadly radiations are given off, it is necessary to put a protective shield around the pile, to make the pile safe for operating personnel. This shield must be of heavy material, perhaps concrete, and several feet thick. The reaction can be controlled. This is done by shoving into the pile rods or strips of material which the little neutrons like better than uranium, but which will not take part in the chain reaction. The net result is a slowing down of the rate of consumption of nuclear energy and consequently the amount of heat generated in the pile.

The scientist simplified the complex-sounding discussion of the atomic pile in operation by telling the audience that a description of a coal-burning furnace, if we knew nothing about fire, would probably sound equally complex. You would have to explain that only certain special materials would burn and that even these would not burn unless you arranged the pieces in a certain way, providing for the continuous supply of oxygen, and heated them to the requisite temperature. You would have to further explain that fire gives off heat radiation which would be dangerous to personnel and which must be surrounded by a shield of brick and iron.

This shield material must be such as would have ample strength even when exposed to the heating radiation. You would also note that fire can be controlled by adjusting the supply of oxygen. Winne then observed that if the wonders and dangers of fire had burst upon our adult consciousness as suddenly as atomic energy, we would have been just as startled and confused as we were by the advent of atomic energy.

The speaker then explained that although a rare type of uranium is the only material found in nature that will support a chain reaction in an atomic pile, under suitable conditions the more abundant type of uranium can be converted to the artificial element of plutonium, a nuclear fuel which is being produced in Hanford, Washington. It is also possible to convert the still more abundant element thorium to an artificial element, uranium-233, which is fissionable.

AGAIN the speaker stressed that this conversion of unreactive material to atomic fuel is truly amazing, but noted that much ordinary illuminating gas has been made by feeding steam through a bed of white hot coke. The gas-making process is not a conversion of atoms, but rather of molecules. It is probably equally strange and startling to one who has never heard of it. The speaker also mentioned another phenomenon of atomic radiation; namely, that of converting an ordinary element such as carbon (non-radioactive) to a so-called radioactive isotope of carbon. Even gold could be produced but the raw material must be platinum "so we haven't quite achieved the goal of the alchemists."

He stated that atomic power plants as he visualizes it would do nothing more or less than replace the fuel-fired steam boiler. No direct conversion to electricity seems fasible, therefore the application of heat released by the atomic reaction to existing generating units seems to be the most practical application. One way of utilizing this heat would be to pump a liquid or gas through the pile and then through a kind of steam boiler which would generate steam which would then

"WHEN YOU OFFERED TO PUT MY NAME IN LIGHTS, I THOUGHT YOU WERE A MOVIE PRODUCER!"

be used to drive a steam turbine generator.

As a result of this, the first costs of an atomic power plant would be somewhat higher than those of the fuel-fired plant under normal conditions. In time the costs of nuclear fuel may be competitive with coal or oil, but Winne noted that this

reduction would not exceed 20 or 25 per cent of the total price paid by the consumer for fuel-generated power—the proportion of fuel cost to the consumer. Larger economies may be effected in areas where the transportation costs on ordinary fuel are extremely high. Winne then said that it is unlikely that smaller atomic power plants would spring up in every isolated area.

To be efficient and economical it would be necessary to build a plant of very large capacity, perhaps at least 100,000 kilowatts, and it may require a supporting chemical plant to reclaim partly used fuel. At the present stage of development scientists are not yet ready technically to build 100,000-kilowatt atomic power plants, and won't be for quite a long time. Winne also discussed other power applications. Because of the heavy protective shield required in the operation, it would seem beyond realization that we would have atomic-powered automobiles.

A REACTOR within the weight and space limitation of a locomotive may be possible as more is learned about making effective shields. The speaker stated that probably the first specific purpose atomic fuel plant may be for shipboard use. This application is attractive because atomic-fueled ships could conceivably run for months without fueling. The probability of atomic-powered submarines is of special interest to the Navy. The Air Force is likewise interested in atomic power for military aircraft but the shield weight limitations presently preclude an early probability of such an application.

Winne then concluded his remarks on the power phases of atomic energy by stating that in his opinion it is absolutely impossible today to state with assurance what the economic efforts of the power applications of atomic energy may be. He stated that he was optimistic enough to believe that ultimately atomic energy will make electric power even more available than it is today, and, in some areas at least, at lower costs.

He noted that the time element of practical application is still a matter of question. He stated that the development will be gradual over a long period of time—evolutionary rather than revolutionary—and in many cases atomic energy will only supplement, not supplant, proper sources of power.

An AEC Commissioner's Views

SPOKESMEN for the Atomic Energy Commission have admitted that it is not a secret that much of the commission's effort is devoted to the manufacture of atomic weapons. This is not a matter of choice but is dictated by international policy considerations. Without doubt, at such future time as the majority of the activities of the commission can be shifted to greater stress on peacetime applications, rapid strides will be made. AEC Commissioner Gordon Dean, speaking before a symposium of the American Medical Association at San Francisco, California, late in June, indicated that perhaps the greatest and most promising field of effort was the production of useful power from atomic energy reactors. He told the assemblage:

> The development of useful power from the energy in the atom's nucleus is at a stage not unlike the early stage of development of the uses of petroleum, shortly after Drake discovered oil in Pennsylvania more than ninety years ago. Oil was important then as a source of light and as a lubricant. The development of the internal combustion engine and the major improvements of the other methods of utilizing this fuel came a quarter of a century later.

Since December of 1942 we have had some sort of machine, called a nuclear reactor for releasing nuclear energy at a controlled rate. Commissioner Dean pointed out that the problem ahead is to improve the design of these reactors in order to make use of the heat energy released in the production of useful mechanical or electrical power. He stated that nuclear fuel has from two to four million times the energy content of coal or oil when considered pound for pound. With respect to expenditures now being

made with an outlook to perfection of economical reactor, he had the following to say:

> Our annual operating expenditures for reactor development have been between 30 to 40 million dollars, with the construction program under way totaling more than $100,000,000.

COMMISSIONER Dean, in his address before this group, touched upon a phase in the development of useful peacetime applications which has often been neglected or hastily passed over. This is the question of determining the amount of available uranium. The raw materials usable in the creation of nuclear energy are relatively exhaustible when compared with other natural resources. Another question which faces the scientist in the development of the new technology, concerns the study of structural materials which go into reactors, and especially what happens to these materials when they are exposed to the high temperature of modern reactors. Much consideration will have to be given, according to the commissioner, to "the study of systems which will permit transfer of the heat energy developed in the reactor over to some fluid or gas which can be used to drive turbines."

Proceeding into the more practical economic problems, those interested in feasible peacetime applications will have to consider the subject of costs, especially reduction of the terrific present cost of reactors. The commissioner commented, "We are making real progress toward solution of these problems. Daily we secure answers. We are optimistic for the peacetime uses of reactors."

It was this latter problem (the economic feasibility of atomic energy reactors in the production of electric power) which Vice President H. P. Winne of General Electric Company covered in his earlier address. The general tone of Winne's remarks question whether the reactors will ever produce electrical energy at a more reasonable cost to consumers than via steam, hydro, or gas turbine generation.

Modern Farming Emphasis on Electricity

ANOTHER late June meeting, that of the American Association of Agricultural Engineers, held in Washington, D. C., delved into the progress of farm mechanization and rural electrification. The group was addressed by Assistant Secretary of Agriculture Knox T. Hutchinson, who devoted a great proportion of his talk to the work of the Rural Electrification Administration. Hutchinson maintained that the extension of rural electrification lines in the past fifteen years to all but about 15 per cent of the farms in America has opened up a whole new field for agricultural engineering. He told his audience, "I am not sure that you agricultural engineers have as yet fully realized the opportunity for service that has been thrown open to you." He added:

> The field of electro-agriculture is growing so fast it is hard to keep pace with the progress being made. Scientists are finding a variety of ways in which electric light and electric heat can be used productively with plants and animals.

The Assistant Secretary listed, item by item, the number of purposes to which electricity might be put on the farm to relieve the farmer of work and worry and also to cut down his losses. Among these he cited the use of electricity in controlling insect pests. This, he said, was being studied by scientists at the Agricultural Research Center at Beltsville, Maryland, working in coöperation with agricultural experiment stations throughout the United States. He ended his account of these many uses with the following declaration:

> . . . the point that I really want to make . . . is that this research has

been developed and given meaning largely because farm people have electricity—or are getting it as rapidly as possible . . . we have just made a start on the hundreds and hundreds of uses to which electricity will eventually be put.

HUTCHINSON cited as one of the current important problems for agricultural engineers the development of a better understanding among farm people of electricity and its uses. In doing so he disclosed the program of an REA group. He stated:

In the Tennessee valley, the Tennessee Rural Electrification Coöperative Association—consisting of 22 coöperatives with about 300,000 families as members—is aiming at an objective of one trained person on every farm, or available to every farm, who can meet the everyday requirements in operating electrical equipment. I am sure other groups of farmers are thinking along the same line. Such a development would not only eliminate the need for calling servicemen whenever minor troubles occur, it would also help improve the use of equipment.

In closing, he stated that the Department of Agriculture is trying to stay abreast of developments in agricultural engineering as well as in other major sciences. "Farmers" he said, "are just as much interested in better standards of living as any other economic group."

Notes on Recent Publications

Attractive booklets now herald the opening of new electric utility plants, many of which bear the names of prominent utility men in the respective organizations. Currently available are four such booklets. The Georgia Power Company has only recently dedicated its Plant Mitchell in honor of William E. Mitchell, former president of the Georgia Company. The booklet gives a biographical sketch of Mr. Mitchell. In its twenty well-illustrated pages, it also gives the reader an "inside look" at the modern new plant and other plants of the power company.

The Dayton Power & Light Company has also issued a "Welcome" to its new O. H. Hutchings Station in the form of an interesting pamphlet. The plant, named after the former vice president and general manager, is located 12 miles south of the city of Dayton, Ohio, on the west bank of the Great Miami river. Its facilities and an outline of the growth and development of the company are covered in word and picture. Illustrated charts showing how electric energy is generated, transmitted, and distributed are also made part of the publication.

In the 1800's Barbadoes Island in the Schuylkill river west of Norristown, Pennsylvania, was a favorite recreation resort for the good people of the adjoining area. Today, nearly a century and a half later, this island is the home of a modern electric generating station constructed by the Philadelphia Electric Company. The $24,000,000 installation at Barbadoes, a new addition to the Philadelphia Company's properties, is colorfully described in a pamphlet made available by the Philadelphia Electric Company.

Color photographs and maps give a complete picture of the operation.

A large 8-page rotogravure presentation of the Boston Edison Company describes its new Edgar station at Weymouth, Massachusetts. Dedication of New England's largest turbo-generator occurred on the twenty-second of September, 1949. Answers to questions about Edgar station give the reader complete information on the new plant and unusual color graphs describing electricity in the making, complete the reader's introduction to the new station.

SOCIAL SECURITY COSTS. The Brookings Institution has published this study of the costs involved in present and proposed social security programs. The authors show how these proposed welfare plans would ultimately have to be paid for and analyze the insurance mechanism employed in supplying benefits for old age, survivors, and disability. The objective of the story is to focus attention on the magnitude of the expanding costs, and the problems involved in financing them. It also raises the question as to whether a safer and better system could readily be devised. THE COST AND FINANCE OF SOCIAL SECURITY. Lewis Meriam, Karl T. Schlotterbeck, and Mildred Maroney. The Brookings Institution, 722 Jackson place, N. W., Washington 6, D. C. Price $3. 187 pages.

The March of Events

In General

FPC Schedules Major Test Cases

THE frequently postponed Phillips Petroleum Company Case has now been scheduled for September 11th by the Federal Power Commission, which originally set March 20th for these hearings, subsequently postponing them to May 1st and then June 26th.

This case is looked upon as an important test of the commission's attitude in the light of President Truman's veto of the Kerr Bill to remove local producers from FPC jurisdiction.

Phillips Petroleum, an intrastate producer, sells wholesale to unaffiliated pipelines. Until the present, FPC has not assumed any jurisdiction over so-called independent producers because of their sales of gas for final resale in interstate utility operations.

But the veto of the Kerr Bill has given the commission an opportunity to regulate the independent producers. Observers will watch this test case closely. This may be one reason for the seemingly cautious approach by FPC and the numerous postponements. The delay would indicate careful preparation by the FPC staff which joined with the Wisconsin Public Service Commission in asking this latest postponement.

Another case before the commission, now scheduled for hearing on September 13th, may answer the question, "What authority has the United States over state-owned hydroelectric developments?" This is the case of the Brazos River Conservation and Reclamation District in Texas.

Governor Allan Shivers (Democrat) recently pointed out that if the FPC assumes complete jurisdiction to license state power agencies, then the Federal government would have the statutory right to "recapture" state property upon the expiration of a 50-year term.

It is forecast that Texas authorities, angered by the recent U. S. Supreme Court decision in the so-called tidelands oil case, will vigorously protest against the assumption of any Federal proprietary control of hydroelectric developments built and paid for by the state.

Coal Chief Raps Gas Price Differentials

NATURAL gas is made available to industrial users at dump rates while householders are charged more than five times as much for the same type of fuel, according to John D. Battle, executive vice president of the National Coal Association.

Addressing the recent 40th annual convention of the New York State Retail Solid Fuel Merchants Association, Mr. Battle, citing the last available government figures, said that householders in the United States paid an average rate of 65.3 cents per thousand cubic feet for natural gas, while the industrial consumers paid only 12.5 cents per thousand cubic feet. This "juggling of prices" is harmful to the general interests of the nation, he asserted.

The reserve supply of natural gas is limited to "a very few decades at best," Mr. Battle said, adding that the use of this fuel should be restricted to "high and important uses" instead of being

promoted in markets that are traditionally served by the coal industry.

After a review of competition coal is experiencing from residual oils, especially those imported to this country, the NCA executive declared there is not enough oil and gas capacity to meet over half of the energy requirements of the nation, "and that for only a limited time."

Southern Company Maps National Advertising Campaign

THE Southern Company and its four associated operating companies—Alabama Power Company, Georgia Power Company, Gulf Power Company, and Mississippi Power Company—have mapped a national advertising campaign to begin in September designed to emphasize the great movement of industry to the southern states.

Such media as *Newsweek, U. S. News & World Report*, and *Business Week* have been scheduled to carry full-page, 4-color advertisements, while several metropolitan dailies—some of them in the commercial field—will tell Southern's story in black and white.

All of the advertisements will stress the tremendous strides made during the past few years in business, agriculture, education, manufacturing, recreation, and health throughout the 105,000-square-mile area served by the operating companies in Southern's system.

AEC Releases Patents to Public

DESCRIPTIONS of 16 patents owned by the U. S. government and held by the Atomic Energy Commission were recently transmitted to the U. S. Patent Office for registry and listing in the official register of patents.

The commission will grant nonexclusive, royalty-free licenses on the listed patents, as part of its program to make nonsecret technological information available for use by industry.

Patents and titles that may prove of interest to utilities include No. 2,507,301, Apparatus for Controlling Magnetic Fields; No. 2,507,321, Leak Testing Device; No. 2,508,234, Distillation Apparatus; No. 2,508,989, Apparatus for Purifying Gases; No. 2,509,009, Insulating Column Structure; and No. 2,-509,394, Vacuum Tube Flux Meter.

Those interested in obtaining detailed descriptions of the patents or wishing to make applications for licenses should apply to the chief, patent branch, office of the general counsel, U. S. Atomic Energy Commission, Washington 25, D. C., identifying the subject matter by patent number and title. Copies of the patents may be obtained from the U. S. Patent Office, also in Washington.

Safety Films Requested

THE Visual Aids Committee of the Public Utilities Section, National Safety Council, has issued a call for the loan of training and safety films.

Visual aids, in the form of motion pictures or sound films, are invaluable in any safety program, the committee says, asking coöperation in a complete listing of all films pertaining to the utility industry that would be available on a loan, purchase, or rental basis.

Companies having such films, produced either by themselves or some organization that is well known, are requested to communicate with Harry F. Ertel, chairman, Visual Aids Committee, 505 York road, Jenkintown, Pennsylvania, giving him name and description of the film, size, approximate length, and how available—rental, loan, or purchase.

Connecticut

Backs Federal Water Survey

GOVERNOR Chester Bowles has urged support for a bill (S 3707) now in the hands of the Senate Committee on Public Works which would provide a commission to study the water resources of the New England-New York region.

Writing recently to Senator Dennis Chavez (Democrat, New Mexico), chairman of the committee, Governor Bowles declared the study would be "an important step toward improving New England's economic outlook."

"The water resources of New England represent one of our greatest assets," the governor's letter said, "yet this great asset is today abused and underdeveloped.

"We have allowed our streams to become polluted by industrial and human waste," he continued, adding that this practice reduces their capacity for recreational use and economic productivity.

District of Columbia

District Judge Modifies Statement

FEDERAL District Judge T. Alan Goldsborough has partially retracted or at least explained his recent charge of utility pressure on the District's public utilities commission. The jurist was criticized by the local press (both *The Washington Post* and the *Evening Star*) for his insinuation of a few weeks ago that the commission's staff was generally favorable to the regulated utilities in hope of obtaining eventual private employment.

Subsequently, Goldsborough made an explanatory statement from the bench that his remarks were not directed towards the District of Columbia commission or its staff. He explained that he was simply referring to the general situation under which regulatory commissions must operate with public utility rate cases.

Attorneys for the Washington Gas Light Company were seeking to include Judge Goldsborough's remarks in the record for the purpose of appealing his decision enjoining the commission's gas rate increases.

At the same time, the court refused to grant the company a stay, pending appeal to the U. S. Circuit Court of Appeals.

Judge Goldsborough drew national attention some two years ago by imposing fines of more than $1,000,000 on the United Mine Workers and their president, John L. Lewis, for contempt of court when the miners ignored his injunction against a strike in the bituminous coal fields.

Transit Fares Raised

THE public utilities commission's recent order increasing fares on busses and streetcars of the Capital Transit Company within the District, effective July 16th, is expected to provide a return of 6.4 per cent on a rate base valuation of $27,500,000. This, the PUC said, should be sufficient return to "preserve the financial integrity of the company."

The commission's order raised fares from 13 cents cash, three tokens for 35 cents, to 15 cents cash, three tokens for 40 cents, and boosted the weekly pass from $1.75 to $2. The company's petition was for a 15-cent cash fare with six tokens for 80 cents and abolition of the weekly pass.

During the hearings, members of the commission had signified their desire that the pass be retained, even adjourning the hearings for a time to give transit officials an opportunity to work out a plan for the elimination of certain known abuses of the pass. The commission said that elimination of this weekly transportation "package" might serve to retard service.

The 3-cent school fare, established by act of Congress in 1933, remains unchanged. But the PUC indicated it felt this should be increased, stating, "It is apparent that this fare does not compensate the company for the cost of service rendered and imposes an undue burden upon other users . . ."

Officials of the company expressed disappointment with the commission's ruling, but declared they will do all they can to give "good and efficient service under the fares ordered."

Georgia

Transit System Sold at Bargain Price

AN Atlanta group has purchased the Georgia Power Company's city and county transit system, with a book value of about $8,000,000, for the extremely low price of $1,300,000 in cash and the assumption of the obligations on trolley equipment of about $3,000,000.

The sale climaxed a 5-week strike by operating employees of an AFL union whose president claimed the purchasers granted the union a contract that amounted to "a complete victory" for the strikers. Atlanta authorities are hopeful that the new management will be able to render adequate and continuous service, notwithstanding increased payroll obligations, in view of the lower capital investment required by the new owners to purchase the property.

Illinois

CTA Gets Private Loan after RFC Turndown

A CHICAGO financial group has underwritten an $11,000,000 loan for the Chicago Transit Authority after the latter had been refused a $15,000,000 equipment loan by the Reconstruction Finance Corporation.

The loan, with other funds the CTA has on hand, will enable the authority to purchase 200 new elevated and subway cars and 500 new busses—100 elevated cars short of the program.

A spokesman for the huge government lending agency said the chief reason for refusing the loan was a belief there was insufficient assurance of repayment by the municipally owned bus and streetcar company because payments on a $105,000,000 bond issue by the CTA would have higher priority for payment out of its income, leaving RFC with a "junior" position.

Equipment trust certificates bearing interest at the rate of 4 per cent are to be issued and bids for the new equipment are now being sought.

Missouri

Union Power Station Wins Approval

THE public service commission recently approved plans of the Union Electric Company to construct a $26,000,000 generating plant at the confluence of the Meramec and Mississippi rivers in southern St. Louis county.

The old Hillcrest Country club grounds, adjoining the plant site, have been purchased by the company. The club property includes 52 acres, a swimming pool, and several large buildings.

A company spokesman said the buildings will be used as construction headquarters for the power plant, but future use of the buildings has not been decided.

Nebraska

Public Power Unit to Be Extended

STATE Engineer Freh Kleitsch has ordered extension of the Madison County Rural Public Power District, and that its name be changed to the Elkhorn Public Power District.

The district formerly was within the

Madison county border, but now includes parts of Pierce, Antelope, Holt, and Wheeler counties.

The Madison district asked that nine members be elected to the board of directors, but Kleitsch denied the request on the ground that it failed to comply with state statutes.

New Jersey

Court Voids 7-cent Bus Fare

The state supreme court recently set aside the basic 7-cent bus fare, charged by bus companies in general throughout the state for the last two years, as "unjust and unreasonable." The court decision voids orders by the state board of public utility commissioners, which granted a 2-cent increase to the Public Service Interstate Transportation Company and Public Service Coördinated Transport, Inc., the two largest bus systems in New Jersey. Similar orders, granting similar increases to most operating companies in the state, were likewise voided by the court's action.

In handing down its decision, the court ordered the board to reconsider the establishment of a "permanent rate and an adequate rate base."

Although there was an immediate impression that the decision restored the prior 5-cent basic fare, the board secretary, Emmett T. Drew, said the point would not be positively clarified until board counsel had an opportunity to study the language of the court.

The fare increase, which was on a tentative basis, was ordered by the board early in 1948 when the two bus companies applied for it after an arbitration board allowed wage increases for drivers and other employees. The higher fare was subject to revision after the returns were studied.

Washington

Exclusive Clause Withdrawn From Franchise Application

Trans-Northwest Gas, Inc., of Seattle, has withdrawn the "exclusive" clause from its application for a franchise to construct natural gas pipelines along highways of the state.

As originally written, one clause of the proposed franchise would have prevented construction of competing gas pipelines between any of the larger cities of the state.

In withdrawing the "exclusive" request, the company said it felt the clause "could lead to possible misunderstanding."

A new firm, Trans-Northwest, seeks to lay pipelines along state highways in 28 counties to transport any natural gas that may be exported from western Canada to principal cities of the state.

Wisconsin

Gas Rate Cut Approved

The public service commission recently approved an application of the Wisconsin-Michigan Power Company, of Appleton, to cut its gas rates a total of about $99,000 a year when it changes from manufactured to natural gas the latter part of this month. The company serves 9,000 consumers in Neenah, Appleton, and Menasha.

Henry J. O'Leary, rate expert of the PSC, said the over-all rate cut will amount to 23 per cent, giving residential customers reductions averaging 20 per cent, while industrial consumers will get a 35 per cent cut.

Progress of Regulation

Acquisition of Local Facilities Requires Federal Power Commission Approval

A PROCEEDING was brought by the Federal Power Commission to determine whether the acquisition by Pennsylvania Electric Company (Penelec) of the facilities of three small local electric utilities not under the jurisdiction of the commission was subject to the requirement of prior commission approval under § 203(a) of the Federal Power Act.

While Penelec is a public utility subject generally to the regulation provided in the act, it contended that its acquisition of the local companies should in no way concern the commission. It argued that this acquisition did not fall within the meaning of the words "merger or consolidation" as they appear in § 203(a) of the act.

The commission ruled that an interpretation of this section in the light of other sections of the act and the purposes for which it was enacted indicated that the acquisition under consideration was within the act. The purpose of Congress in requiring commission approval of mergers or consolidations was to prevent excessive burdening or inflation of the accounts of the acquiring utility. Only if the terms "merge or consolidate" include the acquisition of facilities would the purpose of Congress be effectuated.

The commission also determined that the statute requiring commission approval includes the acquisition of facilities of a local utility not under the act. Only by such interpretation could the major purpose of Congress in enacting the statute be given full effect.

Penelec, in purchasing the facilities without commission approval, had paid $300,000 for facilities having a depreciated cost of about $136,000. It proposed to recoup the excess through annual charges of $11,000 to operating expenses for each of the next fifteen years. It would classify the excess in Account 100.5, Electric Plant Acquisition Adjustments, and would amortize it through charges to Account 505 in the operating expense section of the income statement "above the line" of return on investment. In this way if rates from customers generally provided enough revenue to defray operating expenses, it would collect the entire excess from customers.

The commission described this proposal as the "value merry-go-round." It amplified this characterization with this statement:

> Upon that merry-go-round it is only necessary to assume a utility property has a value, however excessive; use that value as a basis for obtaining revenues that will provide a return on it; and the existence of the value is proved.

The commission directed that the excess of acquisition cost over depreciated original cost be amortized out of income by equal monthly charges over a period not to exceed five years to Account 537, Miscellaneous Amortization, "below the line." This would have the effect of charging the adjustment against stockholders rather than ratepayers.

The commission did not impose any

penalties on Penelec because of its action in completing the acquisition while discussions between it and the commission as to the need for commission approval were still in progress. The commission conceded that in its orders prior to 1944 it had manifested some uncertainty as to the proper interpretation of the act, so as to justify Penelec's having some doubt as to the status of the proposed acquisition. *Re Pennsylvania Electric Co. (Docket No. E-6251, Opinion No. 194).*

Resale Customers Exempted from Electric Rate Increase

THE California commission authorized an electric company to increase by 6 per cent all rates except those being applied to certain contract customers. The new rates would yield a return of 5.01 per cent. The commission believed that the company's existing rate schedules, if increased uniformly on the percentage basis proposed, would not so alter the existing relationship between rate levels as to result in prejudicial charges in any customer class.

The exempted customers fell mainly under the heading of "resale" customers. In justification of the proposed exemption, the company stated that contracts with each had the formal approval of the commission, that the making of special contracts was compelled largely by competitive conditions, and that the contract rates were sufficiently compensatory to meet all direct costs of service. It said that the retention of such customers for a term of years was of benefit to the utility and to customers as a whole. If the exemptions were not granted, the estimated return would be changed from 5.01 per cent to 5.03 per cent.

The commission in authorizing the company to exempt the resale customers from the proposed rate increase recognized the right of a utility to meet competition. It indicated, however, that if the revenue from that class of service should fall below the cost of service, the loss would not be permitted to burden other classes.

The commission then concluded that the special rates would not impose any burden on other customers and that they were more than sufficient to meet the out-of-pocket costs, including depreciation and return on facilities used exclusively for this service. *Re Pacific Gas & E. Co. (Decision No. 43972, Application No. 30717).*

Compromise of Controversial Issues in Holding Company Reorganization Approved

THE Securities and Exchange Commission approved a plan for reorganization of the transportation system of Pittsburgh Railways Company, a subsidiary of Philadelphia Company, a holding company, under Chap X of the Bankruptcy Act and § 11 of the Holding Company Act. The plan provided for the creation of a new company to own and operate the system property and for the allocation of cash and new company stock to the holding company, public creditors, and holders of guaranteed and unguaranteed system securities. The allocations were based upon a compromise of controversial issues concerning the respective claims of the holding company's stockholders and creditors.

The transportation system consisted of two subsidiaries and fifty-three underlier companies. The latter companies were linked to the subsidiary through an intricate chain of leases and operating agreements. The commission pointed out that it could not treat the fifty-five companies in the system as separate corporate entities and identify the property and earnings of each. Therefore, it did not adopt a normal valuation technique in appraising the fairness of the plan. It

viewed the public security holders as participants in a single enterprise.

Previously the commission had ordered the holding company to terminate its relationship with the subsidiary and the underlying companies by disposing of any interests, direct or indirect, which it held in the securities or properties of those companies. The new plan removed existing obstacles and was considered an important step toward ultimate compliance with that order. Consequently, the commission held the plan to be necessary. It also found the plan to be financially sound, with the new capital structure reasonably adapted to the earning power of the new company.

Under both Chap X and § 11(e) the "fair and equitable" standard requires strict adherence to the doctrine of "absolute priorities." This provides that the interests of all claimants must be satisfied in full in the order of their priority of claim before junior interests may be permitted to participate. The commission held that this does not mean, however, that a compromise cannot be made of genuine controversies in issue and a plan approved as fair in the absence of a determination of every issue involved.

Computations by some of the expert witnesses were rejected by the commission as being too high. They failed to make allowances in increases in operating costs over present levels although assuming increased levels of fares. Computations based exclusively on past earnings were also rejected. The commission said that while past experience is a factor to be considered in estimating future earnings, it cannot be accepted as the sole test.

The commission believed it to be unrealistic to assume that if reliance is placed on an operating ratio derived from past experience, one must also anticipate that future revenues will reflect the average fare level of the past when costs were lower and the system had little income tax liability.

The commission adopted the staff's estimate as to prospective average annual net operating income of the new company. In doing so, however, it pointed out that it did not believe this to be the exact amount which would be realized in any given year or period. An estimate of prospective earnings, it said, is not something which can be arrived at with mathematical precision. An informed judgment is the most that can be achieved, particularly in the transit industry, where wide fluctuations of earnings occur.

In holding that the compromise was appropriate, the commission considered all relevant factors. The compromise would eliminate the uncertainties, time, and expense involved in full litigation. The nature and scope of the complex controversies were evidenced by a voluminous record which, while not sufficient to constitute a basis for adjudication on the merits, was sufficient to determine the appropriateness and the fairness of the compromise. The commission pointed out that the plan realistically dealt with the properties and assets of the transportation system as an integral whole and allocated participations on a basis viewed as giving appropriate recognition to the various claims.

An objection was raised that the findings were not specific enough and, therefore, inadequate to support a conclusion that the plan was fair to the holding company. It was claimed that there should be a dollar valuation within which the compromise could be reached.

The commission rejected the claim, stating that it was not required to place a dollar valuation on the claims, but that it was sufficient that it have before it a record on which it could determine whether the public security holders were justified in entering into the compromise and whether the holding company was justified in making the concession to the public security holders provided in the compromise. The commission held that where the status and rank of various claimants has not been determined and there are controversial and complicated issues, a settlement which compromises the opposing contentions does not violate the absolute priority rule. *Re Bauer, Trustee of Pittsburgh Railways Co. (File Nos. 52-28, 54-183, Release No. 9759).*

Financing and Rate Conditions Imposed upon Construction of Natural Gas Pipe-line Facilities

The Federal Power Commission authorized the Transcontinental Gas Pipe Line Corporation to expand the capacity of its previously approved Texas-to-New York natural gas pipeline. The proposed project will be capable of delivering 505,000 thousand cubic feet of gas daily in the company's proposed market areas in New York, New Jersey, and Pennsylvania.

The company demonstrated that its gas supply and the deliverability of that supply would be adequate to support the project for a period of about twenty years. The commission found that the capacity of the pipeline could be fully utilized before the fifth year of operation. It concluded that public convenience and necessity required natural gas service in the areas proposed to be served.

The pipe-line corporation proposed to finance the contemplated additions through cash on hand and the issuance of additional securities, such as a temporary bank loan, first mortgage bonds, and common stock. This would result in a capital structure of 72.2 per cent first mortgage bonds, 4.2 per cent bank loan, 10.9 per cent convertible notes, and 12.7 per cent common stock. The commission held that this resulted in too much debt and too little common equity. It attached a condition to the certificate to the effect that no dividends on common stock should be paid as long as the debt ratio exceeded 75 per cent or the common equity was less than 15 per cent of total capital, or if common equity should be reduced below 15 per cent of total capital by the payment of the dividends.

The company was also required to submit a new rate schedule satisfactory to the commission. The proposed rate structure was not based upon the estimated cost of service as revealed by the record. The estimated return exceeded 6 per cent per year. The commission believed that a reasonable initial firm service rate should be based on the cost of service predicated upon an average of the first three years of the company's operations, with such operations at an average capacity factor of 91.5 per cent.

The proposed rates removed all restrictions on the use of gas for boiler fuel. In view of that fact, the commission said that the commodity component of any rate to be established by the company should be high enough to act as an economic deterrent to overextensive use of gas for boiler fuel. It held that the rate schedule should contain a demand charge of $1.80 per thousand cubic feet per month and a commodity charge of 22 cents per thousand cubic feet.

A proposal to collect from any customer taking more than its contracted demand a penalty of $50 per thousand cubic feet per day was also rejected. The commission did believe, however, that a penalty of $25 per thousand cubic feet would be ample. *Re Transcontinental Gas Pipe Line Corp. (Docket No. G-1277, Opinion No. 191).*

Sale of Unsubscribed Shares Issued Pursuant to Preëmptive Rights Exempted from Competitive Bidding

The Pacific Gas and Electric Company was authorized by the California commission to issue and offer common stock to its stockholders pursuant to their preëmptive rights and to sell to underwriters any unsubscribed shares. The commission, pointing out that such sales to stockholders are exempt from the requirements of its competitive bidding rule, also exempted the sale of unsubscribed shares.

The company's treasurer thought that because of the size of the stock offering and the frequency with which such offerings have been made, there might be insufficient subscriptions by stockholders. The company had completed about two-thirds of its postwar construction pro-

gram and funds were needed for completion.

The company could not afford to risk an unsuccessful offering of stock, considering its needs for capital funds.

He also stated that the proposed issue required a strong nation-wide group of underwriters rather than smaller groups that might be formed if competitive bidding should be ordered. It was his opinion that sales effort and advance market preparation and organization were essential for a successful sale of the stock. The commission concluded that in view of this testimony it was warranted in granting the exemption. *Re Pacific Gas & E. Co. (Decision No. 43889, Application No. 31016).*

Possible Depression of Earnings by Future Construction Costs Ignored in Rate Case

The Tennessee commission authorized an intrastate telephone rate increase which would yield a return of 6 per cent on the company's net investment. This return would produce funds sufficient to pay the intrastate portion of the company's interest on debt securities and an earning rate for equity capital in excess of 8 per cent.

The commission took notice of the demand for new and improved service, particularly in rural areas. It said that if this demand is to be met, the company must have sufficient earnings to justify and inspire the confidence of the investing public to enable it to acquire funds necessary for the expansion program.

The company sought a greater increase than that allowed. Part of its claimed revenue needs represented an allowance to counteract the depressing effect on earnings of continued high-cost construction. The commission said that it was no more appropriate to give effect to an anticipated reduction in earnings because of future construction costs than to give effect to any possible future reduction in operating expenses. Changes to be brought about by future construction or by future increases in labor productivity must, in the commission's opinion, be cared for in the future.

The commission outlined the legal standards followed in fixing rates. It said that a fair return is one which, under honest accounting and responsible management, is just and reasonable both to the public and the utility. Rates must be commensurate with the risk. The company is not entitled to such profits as might attend more speculative enterprises.

Payments made by the company to its parent telephone company under a license contract were considered reasonable. These amounted to one per cent of the company's gross intrastate operating revenue. The commission found that the services rendered by the parent company were of substantial value to its subsidiary, and that the cost of these services as allocated to the latter were less than their cost. It was considered improbable that the operating company could have obtained these essentially needed services at a lower cost from any other source.

The company had employed the practice of contacting large numbers of public officials and prominent and influential citizens during the pendency of the rate hearing for the purpose of explaining the company's need for additional revenue. The commission said that this practice was not a wholesome or desirable one, and, if pursued by the company, should be conducted at the expense of someone other than the ratepayer. It recommended that in the future the company should keep a record of the cost of the hours expended for such contacts and all other related expense data so that such costs could be excluded from operating expenses for rate-making purposes.

The commission cited a case holding that no item of expenditure should be allowed for rate-making purposes unless it could be shown to be an actual and proper charge in the actual conduct of the business. *Re Southern Bell Teleph. & Teleg. Co. (Docket No. U-2983).*

Rate Blocks for Telegraph Company Approved

THE Tennessee commission authorized the Western Union Telegraph Company to establish "a new and scientific message rate structure" to apply uniformly to intrastate and interstate messages. The new rate structure was based on the division of the area of the United States into 50-mile square blocks, arranged in brick fashion, for the purpose of delineating rate zones or areas. The mileages were determined on the basis of air-line distance from rate square center to rate square center, with the same rate applying from any office in a given rate square to all other offices in rate squares equidistant from the originating office square. The company as a whole has experienced a substantial deficit. Under the proposed rate structure there would be a continuing deficit for intrastate operations in Tennessee. Consequently, the commission believed it was unnecessary to determine a rate base or a reasonable rate of return in this proceeding. It pointed out the many inconsistent and discriminatory features in the company's existing complex rate structure. The so-called block or square rates had been used to determine the charges for messages from certain cities or towns in one square to cities and towns in a different square.

Many of the rate squares which normally were intended to be fifty miles square had been distorted to follow railway lines, natural barriers, or state boundaries, with the result that in many instances rates were higher for shorter distances than they were for longer distances. Furthermore, there was a general lack of uniformity in the relationship between initial and additional word rates in the several message classifications. The commission concluded that the proposed rates would eliminate the inconsistent and discriminatory features in the present rate schedules and, for this reason, should be approved. *Re Western U. Teleg. Co. (Docket No. U-3041).*

Other Important Rulings

THE California commission justified its investigation of the rates and regulations of an intrastate airline by pointing out that the section of the Constitution which gives the commission "power to establish rates or charges for the transportation of passengers and freight by railroads and other transportation companies" empowers it to regulate air carriers. *Re California Central Airlines (Decision No. 43932, Case Nos. 4994 et al.).*

The Indiana commission authorized a telephone company to increase rates on condition that the new rates would not apply to any particular line until the line is metallicized. *Re Wallace Coöperative Teleph. Co. (No. 21915).*

The Wisconsin commission modified rates, rules, and regulations of an electric company so as to restrict trailer camp landlords, purchasing electricity from the company, from charging tenants more for submetered energy than the tenants would pay under the commercial service rate if served directly by the utility company. *Re Wisconsin Electric Power Co. (2-U-3103).*

The Pennsylvania commission dismissed for lack of prosecution a complaint charging an individual with engaging in transportation of persons for hire without a certificate where no testimony was offered at the hearing and the matter was submitted on the complaint. Evidence required to support the complaint could not be supplied solely by reference to allegations of the complaint. *Wyatt et al. v. Henry (Complaint Docket No. 14680).*

A single year's operation of a railroad station at a loss was not considered by the Missouri commission sufficient evidence of an unimpeachable downward

trend so as to justify the station's discontinuance. Where there is any doubt in such matters, the commission said, the station should remain open for the accommodation of the public to permit time to determine whether or not the financial situation will improve or worsen. *Re Thompson (Trustee) (Case No. 11813).*

The Colorado commission authorized a bus company to abandon an unprofitable segment of its operation where declining revenues on the line in question made discontinuance necessary for the protection of the remainder of the operation. *Re Greeley (Investigation and Suspension Docket No. 308, Decision No. 34847).*

The United States Court of Appeals, Fifth Circuit, dismissed a suit by the Florida Power Corporation against the Pinellas Utility Board to obtain a ruling that the act creating the board was invalid under Federal and state constitutions and laws. The court ruled that there was no Federal question involved. *Florida Power Corp. v. Pinellas Utility Board et al. 181 F2d 547.*

The California commission, in authorizing a water rate increase which would yield a return of approximately 5.5 per cent, allowed the company to retain its present practice of having a summer rate somewhat lower than the winter rate applicable to equal consumptions. *Re California Water Service Co. (Decision No. 43880, Application No. 30271).*

The Wisconsin commission described a telephone utility's return of 6.5 per cent on its rate base as sufficient to provide a proper reward for efficient management and to attract additional capital. *Re Milton & Milton Junction Teleph. Co. (2-U-3283).*

Titles and Index

Preprints in This Issue of Cases to Appear in PUBLIC UTILITIES REPORTS

Titles

Index

Public Utilities Reports (_New Series_) are published in five bound volumes annually, with an Annual Digest. These Reports contain the cases preprinted in the issues of PUBLIC UTILITIES FORTNIGHTLY, as well as additional cases and digests of cases. The volumes are $7.50 each; the Annual Digest $6.00. _Public Utilities Reports_ also will subsequently contain in full or abstract form cases referred to in the foregoing pages of "Progress of Regulation."

KENTUCKY PUBLIC SERVICE COMMISSION

Re Citizens Telephone Company

Case No. 1916
April 6, 1950

APPLICATION *of telephone company for rate increase; rates for metropolitan exchange area approved and rates for other local service and intrastate toll rates nullified.*

Apportionment, § 7 — Telephone company — Separations Manual.

1. A telephone company's separation of interstate and infrastate operations for rate-making purposes according to the procedures outlined by the NARUC Separations Manual was accepted in a proceeding in which no inequities appeared as a result of their application, p. 131.

Valuation, § 224 — Telephone plant under construction.

2. Telephone plant under construction will be excluded from the rate base in a determination of value for rate-making purposes, but interest upon accumulated investment in construction costs during the time of construction will be allowed until such new service facilities are used for public service, p. 133.

Valuation, § 215 — Property held for future use — Telephones.

3. Property held for future use by a telephone utility will be allowed as part of the rate base where no interest is capitalized while the property is carried in this account, p. 134.

Valuation, § 299.1 — Working capital allowance — Tax accruals — Telephone utility.

4. No working capital allowance was made for a telephone company where accruals for future taxes exceeded the estimated cash requirement, notwithstanding the possibility that corporate income tax laws might be changed in such a way as to affect materially the funds available from tax accruals, since the Commission must decide such matters by the law as it stands, p. 134.

Valuation, § 39 — Reproduction cost new — Telephone rate base.

5. Reproduction cost new was rejected as a method of evaluating telephone property for rate-making purposes as being too conjectural where it was premised in large part upon Western Electric Company translators and unworkable because of the present fluctuating value of the dollar, p. 135.

Valuation, § 28 — Book cost rate base.

6. Book cost is an acceptable means of determining the value of telephone property for rate making, since it approximates the dollars used in the business, and it will be employed in place of reproduction cost new less existing depreciation which bears no relationship whatsoever to dollars actually invested in the business, p. 136.

Return, § 111 — Telephone — Fair return on book value.

7. A return of 6 per cent on book value was considered fair and reasonable for a telephone utility, p. 137.

APPEARANCES: Stephens L. Blakely and Marion W. Moore, Blakely, Moore and Harrison, Covington, and Carl M. Jacobs, Charles G. Puchta, Jr., and A. J. Allen, Jr., Frost and Jacobs, Cincinnati, for the applicant; Charles E. Whittle, Special Consultant, Brownsville, Stanley Chrisman, City Solicitor, Covington, Wesley Bowen, City Solicitor, Newport, Morris W. Weintraub, Special Counsel, Newport, Charles E. Graham, City Attorney, Dayton, Walter Wagner, City Attorney, Bellevue, and Earl Rodney King, Attorney, and Al J. Hovekamp, Chairman, Citizens Economic Council, Covington, for the protestants.

By the COMMISSION: On July 20, 1949, Citizens Telephone Company, filed with this Commission a notice, whereby it proposed to adjust its rates for telephone service within the state of Kentucky, effective on and after August 11, 1949. By order of July 20, 1949, the Commission set the matter for hearing on October 13, 1949, at 10 A. M. in its offices in Frankfort, Kentucky, and ordered the company to notify the public or subscribers affected of such hearing date. The Commission issued notice of hearing to the city and county officials entitled thereto.

On July 25, 1949, the Commission by order, suspended the proposed rates as provided by KRS 278.190 for a period of 120 days from and after August 11, 1949, unless the company should post a bond to be approved by the Commission and conditioned that it would refund to the persons entitled thereto any amount of the increased rates not finally allowed. The company elected to place the rates in effect by posting bond. Subsequently, the rates were suspended for an additional 120 days, and the company provided a further bond.

Following hearings on the 13th, 14th, and 22nd days of October, 1949, during which the applicant presented its case in chief, the matter was, by order of the Commission, continued to December 13, 1949. Then, by subsequent order, pursuant to motion of the Commission's counsel and staff, the matter was continued to January 17, 1950, on which date certain company witnesses were cross-examined. At the conclusion of cross-examination, the matter was, by order of the Commission, continued to February 8, 1950, for the purpose of hearing direct testimony on behalf of the Commission staff. On February 2, 1950, by order of the Commission, the matter was further continued to a date to be determined by the Commission. The parties having agreed to dispense with further hearings, the Commission entered its order on March 2, 1950, making a part of the record certain data furnished by the company in respect to staff requests and set dates for filing of briefs and reply briefs. The data made a part of the record in the order of March 2, 1950, was specifically identified and the record was closed by the Commission's order of March 8, 1950.

General Statement

Citizens Telephone Company, a Kentucky Corporation, is a subsidiary of the Cincinnati and Suburban Bell Telephone Company, an Ohio corporation. The applicant owns no property but leases all properties which it operates from the parent company and pays all of its net income to the lessor as rent. Applicant operates some 51,000 telephones principally in the counties of Kenton, Campbell, Gallatin, Grant, and Pendleton, all in Kentucky. However, approximately 42,000 of the telephones in Kenton and Campbell counties are in the metropolitan exchange area which includes approximately 230,000 telephones operated by the parent company in Hamilton county, Ohio. The metropolitan exchange area is, for the most part, operated as a single unit furnishing each subscriber in that area access to all the telephones in the area without any charge other than the normal local service charge. This local service rate has been uniform for about fifty years. Applicant also provides intrastate and interstate toll service to its customers. The interstate toll service is regulated by the Federal Communications Commission. However, that Commission has no jurisdiction over the local telephone service furnished in the metropolitan exchange area although a portion of the exchange service constitutes interstate communication, § 221 (b) of the Federal Communications Commission Act, 47 USCA § 221(b), nor does that Commission have jurisdiction over intrastate toll service.

The proposed rates of the applicant which are now in effect, under bond, as provided by KRS 278.190, were designed to produce additional revenues of an estimated $464,000 per year, of which the increase on local exchange service represents $391,000. The remainder is represented by increased intrastate toll tariffs and miscellaneous charges. Inasmuch as this Commission's jurisdiction extends only to intrastate telephone service, it is necessary to separate the Kentucky intrastate plant, revenues, and expenses from the entire operations of the company. The separations matter is further complicated in that the metropolitan exchange area facilities operated as a unit by the company must be separated in such manner that the Kentucky portion of that area can be viewed by itself.

Separation of Telephone Plant, Revenues, and Expenses

[1] In separating the interstate operations, applicant followed the procedures prescribed by the Separations Manual which has been recommended by the NARUC. The interstate toll operations of Citizens Telephone Company are not so large a part of the company's business as is ordinarily found. This results from the fact that messages which ordinarily might be classified as interstate toll messages are, under the metropolitan exchange area unit arrangement, classified as local calls. Furthermore, inequities, if any, which obtain by applying the procedures outlined by the Manual, were not evident. Therefore, for this particular case the Commission will accept the company's separation of its interstate and intrastate operations without committing itself in any way with respect to questions which may arise in the future regarding the Manual.

On the other hand, the separation

of the metropolitan exchange area must, and does have, a decided effect in this proceeding because the major part of applicant's property, revenues, and expenses are involved. A review of the record discloses that the company was able to almost categorically assign revenues derived from the Kentucky portion of its metropolitan operations to Kentucky business; but a determination of the amount of plant and expenses associated with the Kentucky metropolitan revenues presents a very difficult problem. To separate these on the basis of revenues, as the company technicians did, is tantamount to determining the answer before the divisions are carried through to a result. The mere fact that 14.18 per cent of the revenues are derived from Kentucky metropolitan business by no means indicates that 14.18 per cent of the plant is used for Kentucky metropolitan operations, nor does it indicate that 14.18 per cent of the metropolitan exchange operations should be assigned to the Kentucky portion. In the over-all, there is some relation between revenues and plant and expenses but the relationship cannot be accurately determined without actual studies. For example, being cognizant of the fact that the local rates are the same on both sides of the river and knowing that the calling rate, i.e., the average number of times that the average telephone is used per day, is lower in Kentucky than in Ohio, it appears reasonable to assume that the expense per dollar of gross revenue is likewise less in Kentucky because it is generally recognized that most, but not all, operating costs vary with use. Moreover, a high volume of traffic requires additional telephone plant in the way of more central office facilities, trunk lines, and other items which are engineered and designed to meet traffic requirements.

For purposes of this particular case, however, we shall accept applicant's separations although we would not be disposed to resolve this question in favor of the applicant were it not for the unique situation which exists with respect to telephone service rendered in the metropolitan area.

The Rate Base

Book cost of Telephone Plant. Company witnesses testified at length as to the accuracy of the books and records of the Citizens Telephone Company and the Cincinnati and Suburban Bell Telephone Company. Records are kept according to the Uniform System of Accounts, prescribed by the Federal Communications Commission and by this Commission, for telephone companies. The plant accounts, it was claimed, represent original cost which, according to the Uniform System of Accounts, includes all actual expenditures for property including all overheads. Among the items, as listed on page 31 of Company Exhibit 1, are: (1) Cost of Labor, (2) Cost of Material and Supplies, (3) Cost of Transportation, (4) Cost of Contract Work, (5) Cost of Protection, (6) Cost of Injuries and Damages, (7) Cost of Privileges and Permits, (8) Taxes, (9) Special Machine Service, (10) Interest during Construction, (11) Insurance, and (12) Construction Services. On page 32, instructions are given permitting the capitalization of overhead construction costs, such as engineering, supervision, general office salaries and expenses,

construction engineering and supervision by others than the accounting company, law expenses, insurance, injuries and damages, relief and pensions, taxes, and interest.

It is an expensive undertaking to establish original cost and to keep it current at all times by means of perpetual property records. This the company says it has done and continues to do. We are of the opinion that the plant accounts of the company are reliable for rate base purposes. Company Exhibit No. 13 shows book costs less depreciation reserve assigned to Kentucky intrastate services in the amount of $7,102,156. A summary of the components making up this amount is copied below:

TABLE I

1. Total Telephone Plant in Service (100.1)	$9,923,656
2. Telephone Plant under Construction (100.2)	323,780
3. Property Held for Future Tel. Use (100.3)	2,633
4. Material and Supplies (122)	133,361
5. Cash Working Capital	139,997
6. Total (1 to 5, inc.)	$10,523,427
7. Depreciation Reserve (171)	3,421,271
8. Book Cost less Depreciation Reserve (6–7)	$7,102,156

The gross plant figure of $9,923,656 was arrived at by using the actual books as a basis for separating the metropolitan exchange area on a gross revenues basis explained heretofore. Of course, it would be necessary to make a separation regardless of the source of the plant figures.

[2] *Telephone Plant under Construction.* The company claims that interest capitalized during the construction period is credited to Interest Income and that this income has been included in the revenues submitted in this case. Company Exhibit No. 18 shows that this statement is not exactly correct. An examination of part I, page 2, shows that it has not been included in gross revenues but has been included on the lines following Net Operating Income which appears on line number 16, page 1. The same situation obtains with respect to part III of Exhibit 18 (there is only one page of Part III). On Part III, Net Operating Income appears at line 17, and represents the difference between operating revenues and expenses. Then, on the following line, interest charged to construction is included although the exact amount thereof is not indicated — it having been combined with other items. In relating Net Operating Income to a rate base for the purpose of determining the rate of return which the company experienced during the test period, we will exclude telephone plant under construction from the rate base and likewise exclude the interest thereon from our computations. In relating Net Income, i. e., income available for fixed charges to a rate base, we will add back telephone plant under construction because the net income figure includes interest during construction on this item.

The North Dakota supreme court, in the case of Northern States Power Co. v. Public Service Commission (1944) 73 ND 211, 53 PUR NS 143, 13 NW2d 779, held that the allowance to a utility of interest upon its accumulated investment in construction costs during the time of the construction of new facilities is sufficient compensation until such new service facilities are used for the public service.

In the case of Department of Public Works v. West Coast Teleph. Co.

(Wash) PUR1933A 487, it was held that construction work in progress should not be added to the fixed capital until the corresponding retirements, if any, have been made and until the revenues to be realized from the work in progress can be added to the operating revenues, in view of the fact that interest during construction is sufficient to compensate the investor for capital used in construction work.

[3] *Property Held for Future Telephone Use.* No interest is capitalized while the property is carried in this account. Therefore, it will be allowed in the rate base.

Materials and Supplies. This amount was obtained by apportioning a part of Account No. 122, Materials and Supplies, as carried on the books of the company, to Kentucky intrastate operations. It is a tangible amount and will be allowed.

[4] *Cash Working Capital.* This is not a tangible figure but was arrived at by a formula. It might be termed the estimated cash which the company must have to carry on its operations. Of course, the company must have cash working capital if it is to function. However, the record indicates that the accrued taxes of the company not due, exceed the estimated cash requirement. Furthermore, local service revenues are billed and collected in advance. No one can deny that among the first things a subscriber must do, upon becoming a subscriber, is to pay one month's local service bill in advance and he continues to pay in advance for the local service although the payments are not always paid the full thirty days in advance due to the fact that there is usually a period of grace of ten days within which the subscriber may pay his succeeding bills without penalty.

The company claims there is a definite possibility that the corporate income taxes laws may be changed in such a way as materially to affect the funds available from tax accruals. It has repeatedly been held that it is not within the ambit of regulatory bodies to anticipate changes in the law. We must govern ourselves by the law as it is today. This point is so well settled that it is not necessary to cite cases. It is common knowledge that corporations, unlike individuals, pay income taxes a year or more in arrears. Corporations on March 15, 1950, were required to pay one-fourth of their 1949 income taxes. The next one-fourth will not be due until June 15, 1950, and, by that time, of course, tax accruals will have been made applicable to the first part of the year 1950.

A few of the recent cases supporting our views with respect to cash working capital are: Re Michigan Bell Teleph. Co. (Mich 1945) 62 PUR NS 77; Re Cities Service Gas Co. (1943) 3 FPC 459, 50 PUR NS 65; and Re Interstate Nat. Gas Co. (1943) 3 FPC 416, 48 PUR NS 267.

Depreciation Reserve. This appears on Company Exhibit No. 13 and on the table above in the amount of $3,421,271 and has been deducted from the gross figure in order to arrive at the net book amount.

Summary of Adjustments. Listed below is a summary of the net book cost rate base for Kentucky intrastate services after adjustments:

TABLE II

Telephone Plant in Service	$9,923,656
Telephone Plant under Construction	—0—
Property Held for Future Telephone Use	2,633
Materials and Supplies	133,361
Cash Working Capital	—0—
Total	$10,059,650
Depreciation Reserve	3,421,271
Book Cost Less Depreciation Reserve	$6,638,379

[5] *Reproduction Cost New.* Applicant through its witnesses introduced considerable testimony and exhibit material, relative to reproduction cost new less existing depreciation; this is commonly referred to as RCN.

KRS 278.290 reads in part as follows: ". . . In fixing the value of any property under this subsection, the Commission shall give due consideration to the history and development of the utility and its property, original cost, cost of reproduction as a going concern, and other elements of value recognized by the law of the land for rate-making purposes."

In considering the history and development of the utility and its property, we find in this case that for the most part its history has been a prosperous one; that it has developed as a part of the Cincinnati and Suburban Bell Telephone Company, which in turn is affiliated with the American Telephone and Telegraph Company, although that company does not own the controlling interest; that the books and records of applicant accurately reflect the investment in property and equipment; that the original cost reflected on the books is reliable, accurate, current, and continuing; that the cost of reproduction as a going concern is too conjectural to have probative value and is subject to the many other familiar objections which will be discussed hereinafter and that we must look to recent cases decided by the Supreme Court of the United States, in order to determine the other elements of value recognized by the law of the land for rate-making purposes, and perhaps we must likewise look to that court to determine the weighting that must be given to the various elements.

In the case of Canadian River Gas Co. v. Federal Power Commission (1945) 324 US 581, 89 L ed 1206, 58 PUR NS 65, 80, 65 S Ct 829. The court at pages 604, 605 said:

". . . The Commission rejected estimates of reproduction cost new less observed depreciation because they were 'too conjectural to have probative value' and adopted original cost as 'the best and only reliable evidence as to property values.' 43 PUR NS at pp. 213, 214. Canadian maintains that if its leaseholds are to be included in the rate base, it was improper to value them as the Commission did. Canadian offered evidence that their present market value was much higher. It also offered evidence of a commodity market value of natural gas per thousand cubic feet which would give a much higher value to the production phase of Canadian's business. We do not stop to develop the details of these lines of evidence. We cannot say that the Commission was under a duty to put the leaseholds into the rate base at the valuation urged by Canadian unless we revise what we said in Federal Power Commission v. Natural Gas Pipeline Co. (1942) 315 US 575, 586, 86 L ed 1037, 1049, 42 PUR NS 129, 62 S Ct 736, and overrule Federal Power Commission v. Hope Nat. Gas Co. (1944) 320 US

591, 88 L ed 333, 51 PUR NS 193, 64 S Ct 281. We held in those cases that the Commission was not bound to the use of any single formula in determining rates. And in the Hope Natural Gas Company Case we sustained a rate order based on actual legitimate cost against an insistent claim that the producing properties should be given a valuation which reflected the market price of the gas. In those cases we held that the question for the courts when a rate order is challenged is whether the order viewed in its entirety and measured by its end results meets the requirements of the act. That is not a standard so vague and devoid of meaning as to render judicial review a perfunctory process. It is a standard of finance resting on stubborn facts. . . ."

In the Hope Case (1944) 320 US 571, 88 L ed 333, 344, 51 PUR NS 193, 199, 64 S Ct 281, the Supreme Court said:

". . . The heart of the matter is that rates cannot be made to depend upon 'fair value,' when the value of the going enterprise depends on earnings under whatever rates may be anticipated."

The Utah Public Service Commission, in Public Service Commission v. Utah Power & Light Co. (1943) 50 PUR NS 133, 147, said:

". . . It is idle to argue that the obligations of the ratepayers to the company should be based on the fluctuating value of the dollar when the company had no such obligation to its investors."

The District of Columbia Public Utilities Commission in the case of Re Potomac Electric Power Co. (1944) 55 PUR NS 65, held that a rate base predicated upon original cost is fair to the utility, its investors, and consumers, because it gives recognition to every dollar actually invested in the property.

We are also of the opinion that reproduction cost new, as presented in this case, is too conjectural — being premised in large part upon Western Electric Company translators, that it is no indication of the capital requirements of the company, and that the present fluctuating value of the dollar renders it unworkable in that the study made in 1949 may already be obsolete.

The RCN figures were presented in conjunction with what the company termed "existing depreciation." Company witnesses testified that the existing depreciation which they associated with RCN, but did not associate with original cost, was a much lower percentage than the depreciation reserve, as shown by the books of the company when that reserve is related to book cost of plant. However, applicant's witnesses made no attempt to adjust the depreciation expense downward, based upon their existing depreciation studies.

The Hope Case, *supra,* holds that annual depreciation should be based on cost, and that under such a procedure, the utility is made whole, and the integrity of its investment maintained. No more is required. The case cites several other cases in accord.

The determination of existing depreciation is also a speculative matter. How can one determine the depreciation that has taken place in an electric light bulb that is still burning?

[6] Company Exhibit No. 1, at page 16, directs applicant to carry its

plant accounts at original cost and to make disposition of any amounts in excess thereof. We believe that the book cost rate base approximates the dollars used in the business, and that RCN less existing depreciation today bears no relationship whatsoever to dollars actually invested in the business.

The Commission has, in its judgment, weighed the elements to be considered in arriving at a rate base that is fair and reasonable both to the company and to its customers and finds that the rate base of Citizens Telephone Company, in this case, should be $7,000,000 when related to Net Operating Income, and $7,323,780 (which includes plant under construction) when related to Net Income.

Operating Revenues

Total Operating Revenues for the period July 1, 1948, through June 30, 1949, after providing for uncollectibles, were $2,613,846. This is reflected on Company Exhibit No. 18, part I, page 1, and has not been questioned.

Operating Expenses

Operating Expenses excluding Operating Taxes for the test period, i. e., July 1, 1948, through June 30, 1949, are stated on Company Exhibit 18 in the amount of $2,067,539. On the same Exhibit, Operating Taxes are stated at $301,382 making a total of $2,368,921.

Rate of Return

[7] Applicant contends that it should be allowed a rate of return on its Kentucky intrastate property of between 7.2 per cent and 7.3 per cent. Mr. Martindell, a witness for the company, presented elaborate testimony and exhibits pertaining to rate of return. Company Exhibit No. 21, section 18, page 1, prepared by Mr. Martindell, places the rate of return at 6.254 per cent which appears on line 4. On the next line, however, line 5, an adjustment is made for higher risks in Kentucky of 20 per cent. The 20 per cent increase is worked out on line 6 and we note that the higher risk has been applied to the equity portion of the hypothetical capital ratio only. In other words, a higher risk was not claimed for the debt capital but was left unchanged at 3 per cent. If debt capital can be obtained as cheaply for Kentucky operations as for Ohio operations, it appears to us inconsistent to claim that equity capital for Kentucky operations would cost 20 per cent more in Kentucky than in Ohio. In the first place, however, we are not convinced that there should be any difference in the cost of money for the two operations which, for all practical purposes, are operated by the same company and thus capital must be obtained through identical channels. The Cincinnati & Suburban Bell Telephone Company not only owns the capital stock of the applicant but it also owns all of the properties which applicant operates and the greater part of the investments in buildings and central office equipment, represents facilities which are located in Cincinnati and used jointly in its broadest sense. This is true of both local facilities and toll facilities because the same dial central office facilities and toll switchboards serve the entire metropolitan exchange area.

We believe that a return of 6 per cent is fair and reasonable for this

company under the circumstances. This is only slightly less than the return which Mr. Martindell advocated before applying his risk factor to the equity capital for Kentucky only. We might also add that it is common knowledge that the cost of money is less today than it was ten years ago and that even then a 6 per cent rate of return was usually considered ample for most nonspeculative utility operations.

Conclusion

A 6 per cent return on the $7,000,000 rate base would require Net Operating Income of $420,000. The actual Net Operating Income for the test period was $244,925. This is arrived at by deducting operating expenses of $2,368,921 from operating revenues of $2,613,846. Thus the deficiency was $175,075. After giving effect to Federal and state income taxes and the one per cent general services and licenses payment to the American Telephone and Telegraph Company, a rate increase of $292,000 would have been required to wipe out the deficiency.

If we should use the rate base of $7,323,780 and the 6 per cent rate of return, a net income of $439,427 would be indicated. The actual net income available for fixed charges, dividends, and surplus during the test period was $206,216. Thus under this assumption, there would be a deficiency of $233,211 which would require an increase in gross receipts of $388,000.

The increase in local service rates and charges for which applicant seeks authorization in the Kentucky Metropolitan exchange area alone is an amount falling slightly more than midway between the $292,000 and the $388,000 figures mentioned above.

There have been no protests as to applicant's service. The data furnished in response to staff requests, and made a part of the record in this proceeding, indicates that the company has made good progress with its construction program and, as of December 1, 1949, had only 689 held orders for service which indicates that the company is rendering good and adequate service. Furthermore, it appears that applicant realizes certain economies resulting from the operation of the metropolitan exchange area as a single unit. Moreover, uniform local service rates and charges are manifestly desirable if reasonable for a telephone company.

Therefore, applicant's proposed rates and charges for local service in and to the metropolitan exchange area, which it is now collecting under bond, as provided by KRS 278.190, will be, and are, hereby approved; the rates and charges for local service, other than for the metropolitan exchange area service, and the intrastate toll rates which applicant is likewise collecting under bond, are hereby nullified, canceled, and held for naught, and the company shall proceed to refund the excess amount collected under the voided rates over and above the rates which have been authorized.

Mrs. E. J. Straube et al.

v.

Bowling Green Gas Company

No. 41307
— Mo —, 227 SW2d 666
February 13, 1950; motion for rehearing or to transfer to court en banc denied March 13, 1950

APPEAL *from judgment dismissing petition to determine ownership of, and to recover an interest in, funds refunded to natural gas distributing company upon affirmance of wholesale rate reduction order; judgment affirmed.*

Reparation, § 9 — Jurisdiction of court — Ownership of refunds to distributing company.

1. The district court, rather than the Commission, has jurisdiction to determine both the ownership of funds received by the distributor of natural gas from a Federal court upon affirmance of a rate reduction order of the Federal Power Commission and the interest of ultimate customers in allegedly excessive amounts collected by the natural gas company from its customers after the effective date of the rate reduction order, p. 141.

Reparation, § 11 — Jurisdiction of Commission — Award of refund.

2. The Commission is an administrative body only, with no power to exercise a judicial function, to promulgate an order requiring pecuniary reparation or refund, or to determine damages, p. 142.

Rates, § 124 — Reasonableness — Definite return.

3. Rates must be just and reasonable, but they need not yield any particular return, since what constitutes a fair return is only the basis for the rate fixed by the Commission, p. 145.

Reparation, § 3 — Right to refund — Constitutional limitations.

4. Money collected by a utility under an established rate schedule becomes the property of the utility, of which it cannot be deprived by either legislative or judicial action without violating the due process provisions of the state and Federal Constitutions, p. 145.

Reparation, § 43.1 — Ownership of impounded fund — Reduction of wholesale gas rate.

5. Natural gas customers may not recover from a distributing company any proportional interest in funds refunded to the company upon affirmance of a rate reduction order of the Federal Power Commission, or in rates collected by the distributing company after the effective date of the order, where it charged rates approved by the Commission, p. 145.

Courts, § 1 — Limitation upon powers — Courts of equity.

6. Courts of equity can no more disregard statutory and constitutional requirements and provisions than can courts of law, p. 145.

APPEARANCES: Long & McIlroy, Bowling Green, Rendlen, White & Rendlen, Hannibal, for appellants, William L. Hungate, Troy, of counsel; John H. Haley, James D. Clemens, Bowling Green, for respondent.

DALTON, J.: Action in equity by which plaintiffs seek to determine the ownership of and recover an interest in certain funds received by the defendant. The trial court sustained a motion to dismiss and plaintiffs have appealed.

Respondent is a distributor of natural gas within the city of Bowling Green, Missouri. Appellants are some of respondent's customers and the users of natural gas in said city. As representatives of such class, appellants have instituted this action for themselves and for all others similarly situated to compel respondent to pay to its customers their alleged respective proportional interest in two mentioned funds. One fund is the amount received by respondent from the registry of the United States circuit court of appeals of the eighth circuit upon the affirmance of a rate reduction order of the Federal Power Commission and the other is the alleged excess amount collected by respondent from its customers after the rate reduction order was in effect as to respondent's purchases of gas and before a new rate had been established to respondent's customers. Appellants asked a "decree and judgment permanently restraining and enjoining defendant from directly or indirectly claiming or asserting any rights to either of said funds," determining defendant's indebtedness to plaintiffs "and ordering and directing defendant to deliver and pay over to plaintiffs and the persons comprising the class which plaintiffs represent, the several amounts so found to be due each."

Respondent at all times collected for gas sold to its customers at a rate established and approved by the Public Service Commission of Missouri, but during the period in question respondent had been buying gas from the Panhandle Eastern Pipe Line Company, a corporation, and paying therefor at a fixed rate undiminished by the rate reduction order of the Federal Power Commission. The excess so collected above the new rate was deposited by the pipe-line company in the registry of the Federal court pending the disposition of that litigation. At the close of the litigation, the rate reduction order of the Federal Power Commission was affirmed and a refund was made to respondent of the total excess amount which had been collected by the Panhandle Eastern Pipe Line Company from respondent.

Appellants alleged "that under an appropriate order of said United States circuit court of appeals for the eighth circuit, the defendant was permitted to draw down the sum of $23,529.01 which was the amount allocated to defendant for the impoundment period October, 1942, through September, 1945, after filing a due and

proper undertaking by the terms of which defendant was to pay to the ultimate consumers, being defendant's customers, including plaintiffs, any amounts which a court of competent jurisdiction might determine to be due." Appellants' claim to this fund is based on the theory that the reduction in the cost of gas to respondent should be passed on to respondent's customers, the ultimate consumers of the gas.

The petition is in two counts and concerns the two funds, one in the sum of $23,529.01, mentioned *supra,* and the other in the sum of $536.34, which, as stated, represents the alleged excess collected by respondent from its customers for gas at the established rate, after the refund and reduction order were in effect and before respondent, with the approval of the Public Service Commission of Missouri, reduced its rate to its customers. The subsequent rate reduction by respondent to its customers was based upon the fact that respondent was then purchasing gas from the pipe-line company at the reduced rate. Appellants further alleged that respondent was under the regulation and control of the Public Service Commission of Missouri and "earned not less than the maximum return upon the investment as allowed and fixed by the Public Service Commission of Missouri, not including the amount impounded by the U. S. circuit court of appeals for the eighth circuit." Appellants contend that respondent's retention of the funds mentioned constitutes an unjust enrichment of respondent at the expense of its customers and that the customers are entitled to their respective proportional interest in the funds. The trial court sustained a motion to dismiss the petition and assigned as grounds therefor that the court was "without jurisdiction to determine reasonable rates or to order repayment of moneys received in accordance with rates fixed by the Public Service Commission of Missouri."

The petition appears to confuse matters within the jurisdiction of the Public Service Commission of Missouri under Art 4, Chap 35, § 5644 et seq., RS 1939, Mo RSA, with matters within the jurisdiction of the circuit court, because appellants not only prayed the court to determine the respective interests of the appellants as a class and as individuals in and to the respective funds, but also prayed for an order requiring respondent to produce its books, records, and accounts so that the interest of the appellants and of all of the others in the class with appellants in the fund could be establishd and determined and so that the investment and the earnings of respondent could be determined. We think the record requires a decision as to whether or not appellants stated a claim upon which relief could be granted for the determination of property rights and for relief in equity, matters within the jurisdiction of the circuit court.

[1] Appellants say that the action is "purely and simply a matter of unjust enrichment"; that it "does not involve reasonableness of rate nor return of any money collected under the rate by respondent from its own funds"; that "the rate had long since been charged and collected in full by respondent"; and that "at the outset the rate for the respondent was fixed by the Public Service Commission in the regular

statutory manner." There is no contention that respondent at any time collected any amount in excess of the rate filed with and approved by the Public Service Commission of Missouri. The pleadings admit that, during the entire period in question, respondent charged, and appellants paid for the natural gas used by them, no more and no less than that provided by the rate schedules so filed and approved. Appellants do not complain of these rate schedules nor seek a modification thereof, but appellants contend that, if respondent retains the two funds mentioned it will receive a sum in excess of the maximum return upon which the rate was based. The question presented concerns only the property rights, if any, of the appellants and the other customers of respondent in the particular funds described in the petition. Jurisdiction to determine these rights was vested in the circuit court. Article 5, §§ 1, 14, Const Mo 1945, Mo RSA. The Public Service Commission of Missouri has no jurisdiction of such a controversy.

[2] "The Public Service Commission is an administrative body only, and not a court, and hence the Commission has no power to exercise or perform a judicial function, or to promulgate an order requiring a pecuniary reparation or refund." State ex rel. Laundry v. Public Service Commission, 327 Mo 93, PUR1931B 376, 392, 34 SW2d 37, 46; May Department Stores Co. v. Union Electric Light & P. Co. (1937) 341 Mo 299, 21 PUR NS 77, 101, 107 SW2d 41, 57; State ex rel. Rutledge v. Public Service Commission (1926) 316 Mo 233, 289 SW 785, 787. "The Commission 'has no power to declare or enforce any principle of law or equity' . . . and as a result it cannot determine damages or award pecuniary relief." American Petroleum Exchange v. Public Service Commission (1943) 351 Mo —, 172 SW2d 952, 955.

While the circuit court dismissed for want of jurisdiction, the judgment of dismissal is presented for review on this appeal and we may reverse or affirm or give such judgment as such court ought to have given. Section 140(c) of the General Code for Civil Procedure, Laws 1943, p 395, Mo RSA § 847.140(c) provides: "The appellate court shall examine the transcript on appeal and, subject to the provision of subsections (a) and (b) of this section, award a new trial or partial new trial, reverse or affirm the judgment or order of the trial court, or give such judgment as such court ought to have given, as to the appellate court shall seem agreeable to law. Unless justice requires otherwise the court shall dispose finally of the case on appeal and no new trial shall be ordered as to issues in which no error appears."

Appellants' theory of unjust enrichment is based on the facts stated, to wit, that respondent was paying a fixed rate for gas purchased from the Panhandle Eastern Pipe Line Company and was selling the gas to its customers at a rate fixed and approved by the Public Service Commission of Missouri; that the cost of gas to respondent was taken into consideration by the Public Service Commission of Missouri in fixing the reasonable rate at which respondent should sell gas to its customers; that respondent was

prohibited by law from collecting or receiving any money in excess of the established rate, § 5645, RS 1939, Mo RSA; that, if respondent charged its customers any sum in excess of the established rate, the customers could recover it (May Department Stores Co. v. Union Electric Light & P. Co. *supra*); that respondent had charged and collected from its customers the maximum rate fixed by the Public Service Commission; that, thereafter, respondent received the rate reduction in the cost of gas and the refund, as alleged, and holds it under a claim of right; and that, after the rate reduction to respondent was in effect, respondent for a further period mentioned continued to collect for gas at the established rate, until a new and reduced rate to respondent's customers was filed and approved by the Public Service Commission.

Appellants say that their claim is based on the "matter of a reduction in one of the fixed items composing the rate which was unforeseen at the time the rate was fixed"; and that respondent was a mere conduit, since respondent collected the wholesale cost of the gas from its customers and immediately paid it to the pipe-line company with no portion thereof remaining in respondent's hands. Appellants argue that "respondent is not equitably entitled to the money"; that "the financial status of respondent will not be altered in any way if the two funds are returned to the appellants, the ultimate consumers of the gas"; that if respondent retains "this money it would be receiving a 'windfall,' an unjust enrichment"; and that "the two sums, if retained by the respondent, would be money in addition to the money lawfully retained by the respondent under the rate fixed by the Public Service Commission." Appellants further insist that the purpose of the Natural Gas Act, § 1, 15 USCA § 717, was to protect the ultimate consumers and not the intermediate utility. Mississippi River Fuel Corp. v. Federal Power Commission (1941) 40 PUR NS 213, 121 F2d 159, 164; Federal Power Commission v. Interstate Nat. Gas Co. (1949) 336 US 577, 93 L ed 895, 79 PUR NS 45, 69 S Ct 775, 778. It is also said that the act establishing the Public Service Commission was designated to protect the public and only incidentally, the utility. State ex rel. Electric Co. v. Atkinson, 275 Mo 325, PUR1919A 343, 204 SW 897, 899. Appellants say that the sole purpose of this action is to determine whether the distributor or ultimate consumer is entitled to the funds mentioned. If, on the facts stated in the petition, the appellants are entitled to no part of either fund, the judgment must be affirmed.

Appellants concede that their rights are to be determined under state law and cite Central States Electric Co. v. Muscatine, Iowa (1945) 324 US 138, 89 L ed 801, 57 PUR NS 81, 65 S Ct 565, 568. In support of their claim to the two funds, appellants cite Federal Power Commission v. Interstate Nat. Gas Co. *supra,* and say that the facts and law in that case closely parallel the present case. Reference is had to that case for "a plain statement of appellants' contention herein." That case involved the distribution of a fund in the custody and control of the Federal court, a fund accumulated under the direction and orders of the court, a fund of the court's own crea-

tion. Claims to the fund were "determinable solely with reference to Federal law." In this case, we are not here called upon to distribute a trust fund of the court's own creation. This court has no custody of the funds here in question, nor any discretion to distribute them under equitable principles, as discussed in Inland Steel Co. v. United States (1939) 306 US 153, 83 L ed 557, 59 S Ct 415, 418; United States v. Morgan (1939) 307 US 183, 83 L ed 1211, 29 PUR NS 47, 59 S Ct 795, 801. Nor is the distribution of the funds an administrative matter, as discussed in the case of Federal Power Commission v. Interstate Nat. Gas Co. *supra,* 79 PUR NS at p. 49, 69 S Ct at p. 779. In that case the court said: "Distribution of the fund should not involve prolonged litigation. It is an administrative matter involving the exercise of an informed judgment by the Federal court and should have the flexibility and dispatch which characterize the administrative process."

Other authorities cited by appellants include Nodaway County v. Kidder (1939) 344 Mo 795, 129 SW2d 857; Indiana Truck Co. v. Standard Accident Insurance Co. (1936) 232 Mo App 63, 89 SW2d 97; York v. Farmers' Bank (1903) 105 Mo App 127, 79 SW 968; ALI Restatement, Restitution, § 160, comment (d); Pomeroy, Equity (5th ed) § 1047, par. 2; 41 CJ 47, Money Received, § 34; 58 CJS, Money Received, § 15, p. 924; 4 Am Jur 508, Assumpsit, § 20.

These authorities do not aid appellants under the facts stated in their petition and conceded in their brief. The Nodaway County Case, *supra,* was an action for money had and received by defendant to plaintiff's use. In that case a county judge had been paid county funds to which he was not entitled. He had collected money for services in addition to the salary provided by law. The county was permitted to recover the funds wrongfully collected by the defendant and to which he was not entitled. Appellants rely upon a statement in that opinion to the effect that an action for money had and received "lies whenever one person has received money *belonging to another* which in equity and good conscience he ought to pay to the *owner.*" (Italics ours.) 129 SW2d at p. 861.

In the Indiana Truck Company Case, *supra,* the court said that, "in accepting payment from the county, defendant has received and is retaining money which rightfully should have gone to plaintiff under and by virtue of its assignments duly executed to it and on file with the county court." 89 SW2d at p. 105.

In the York Case, *supra,* the court points out the necessity of showing that the plaintiff was "legally entitled" to the fund received by the defendant. The American Law Institute Restatement of the Law of Restitution, § 160 comment (d) refers to unjust enrichment and unjust privation and states that "in most cases where a constructive trust is imposed, the result is to restore to plaintiff property of which he has been unjustly deprived and to take from the defendant property, the retention of which by him would result in a corresponding unjust enrichment of the defendant." The other authorities point out that an action for money had and received lies against a party for money

received "if in equity and good conscience he is not entitled to hold it against the true owner." The purpose of the action "is to afford relief when it is shown that money or its equivalent has been received under circumstances under which such person receiving same should not retain it, and should, according to equity and conscience, be returned to the party to whom it belongs." Ford-Davis Mfg. Co. v. Maggee (Mo App 1921) 233 SW 267, 268.

[3] While appellants charge that the receipt of the two funds permits respondent to have a return in excess of a "maximum return upon the investment as allowed by the Public Service Commission of Missouri," appellants concede that the definite rate, which the respondent could and did charge, was prescribed by the Commission. What constitutes a fair return is only the basis for the rate fixed. Section 5645, RS 1939, Mo RSA. The rate must be just and reasonable. The ultimate return to respondent as a result of the rate so fixed and subsequently charged and collected will necessarily vary from time to time. "The law, of course, did not require that the rates at any time yield any particular return." State ex rel. Capital City Water Co. v. Public Service Commission (1923) 298 Mo 524, 252 SW 446, 456. No maximum or minimum return was determined when the rate was established. The contention and allegation that, if respondent is permitted to retain the said funds, it will result in respondent having charged and collected in excess of the "maximum return" cannot aid appellants, since the law of the state only provides for the fixing of rates and does not fix the maximum return thereunder.

[4–6] The facts alleged by appellants in the petition before us show that respondent lawfully came into possession, custody and control of both funds without any encroachment upon the rights of the appellants. Respondent never collected and appellants never paid more than the legally established rate for gas furnished by respondent and appellants' rights were never invaded. The money legally and properly collected from appellants under the established rate schedules became and was the property of respondent. When the established rate of a utility has been followed, the amount so collected becomes the property of the utility, of which it cannot be deprived by either legislative or judicial action without violating the due process provisions of the state and Federal Constitutions. Mo RSA Const Art 1, § 10; USCA Const Amend 14. Arizona Grocery Co. v. Atchison T. & S. F. R. Co. (1932) 284 US 370, 76 L ed 348, 52 S Ct 183; (1931) 49 F2d 563, 569; Farmers Union Livestock Commission v. Union P. R. Co. (1939) 135 Neb 689, 28 PUR NS 416, 283 NW 498, 504; Miller Mill Co. v. Louisville & N. R. Co. (1921) 207 Ala 253, 92 So 797, 802; St. Louis-S. F. R. Co. v. State (1932) 155 Okla 236, 8 P2d 744, 745; State ex rel. Boynton v. Public Service Commission, 135 Kan 491, PUR 1933A 415, 11 P2d 999, 1006. Appellants' rights not having been invaded by the charges and collections made by respondent there was no basis in law or equity for appellants to claim either of the mentioned funds.

"Courts of equity have no more au-

thority to disregard plain provisions of a statute than do courts of law. Equity follows the law. The rule in this regard is well stated in 10 RCL p. 382, as follows: 'Courts of equity can no more disregard statutory and constitutional requirements and provisions than can courts of law. They are bound by positive provisions of a statute equally with courts of law. . . . So wherever the rights or the situation of the parties are clearly defined and established by law, whether it be common or statutory, equity has no power to change or unsettle those rights or that situation. . . .'" Aetna Insurance Co. v. O'Malley (1938) 342 Mo 800, 118 SW2d 3, 10. No facts are stated to support a conclusion that the appellants were "the true owners" of either fund in law or in equity, or that appellants were "beneficially entitled" to either fund. Further, while both funds were received by respondent, one upon the orders of the Federal court, and the other by the collections for gas at the legally established rate, appellants' right of recovery on any theory of unjust enrichment necessarily depends upon whether, by the receipt of the funds, respondent was enriched at the loss and expense of the appellants. ". . . unjust enrichment of a person occurs when he has and retains money or benefits which in justice and equity belong to another." Hummel v. Hummel (1938) 133 Ohio St 520, 14 NE2d 923, 927. Since the facts alleged show no "unjust privation" of appellants and no legal or equitable rights in appellants as to either fund, there could be no "unjust enrichment" of respondent at the expense and loss of appellants.

We hold that neither count of the petition stated a claim upon which relief could be granted. The court did not err in sustaining the motion to dismiss. The judgment is affirmed.

All concur.

MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

Re Metropolitan Transit Authority

D.P.U. 8470-Q, D.P.U. 8852
May 19, 1950

APPLICATION *by transit authority for permission to extend service over route served by another motor carrier and investigation of present operating rights; authority granted and existing carrier's certificate revoked.*

Monopoly and competition, § 2 — Passenger transportation — Regulated monopoly.

1. Public welfare is best served by a regulated monopoly in the field of passenger transportation as well as in the other fields of public utility operations, p. 150.

RE METROPOLITAN TRANSIT AUTHORITY

Certificates of convenience and necessity, § 146 — Basis for revocation — Extension of new service.

2. Evidence justifying a finding that public interest requires the extension of a transit company's service along streets being served by a licensed motor carrier requires a finding that it is in the public interest to revoke the existing carrier's certificate, p. 150.

(WHOULEY, Commissioner, dissents.)

APPEARANCES: Willis B. Downey and William J. Fitzsimmons, for Metropolitan Transit Authority; Nyman H. Kolodny and Barrett Elkins, for Pierce Bus Lines, Inc.

By the DEPARTMENT: Metropolitan Transit Authority filed on October 13, 1949, in accordance with § 10 of Chap. 544 of the Acts of 1947, application for a license to operate motor vehicles for hire for the carrying of passengers in Boston over River street in the Hyde Park district between the junction of Hyde Park avenue and River street (Cleary Square) and the Boston-Dedham line. Upon investigation, it was found that Pierce Bus Lines, Inc. presently operates a bus line on the route over which such authority was sought, at least in part, and the Department thereupon entered upon an investigation upon its own motion (D.P.U. 8852) to determine whether public convenience and necessity presently exists which would require the operation of this line by Pierce Bus Lines, Inc. It was the intention of the Department in so proceeding to determine whether the transportation needs of the public, in the event a license were to be granted to the M.T.A., could or should be served by two bus lines operating over the same route.

A public hearing was held on the application of the M.T.A. (D.P.U. 8470–Q) on October 31, 1949, before an employee of the Department thereto delegated under § 4 of G.L., Chap. 25. However, although counsel for Pierce did not object to the procedure therein followed, it appears that there was no sworn testimony taken at this hearing. The Commission thereupon concluded that its decision in a matter of this nature should be based upon more formal evidence than was in the record. Accordingly, on the Department's own motion, this hearing was reopened on March 23, 1950, and a formal record taken of the testimony of a number of witnesses, all of whom were subjected to or were available for cross-examination by counsel for Pierce. A public hearing after due notice was held in the investigation by the Department (D.P.U. 8852) on December 8, 1949, which was continued until January 4, 1950. The two matters are considered together and the findings of fact made herein are applicable to both proceedings.

Pierce Bus Lines now operates in the Hyde Park district of the city of Boston under certificate granted in 1926 by the Department. Previous to 1921, the Eastern Massachusetts Street Railway Company operated streetcars over the route in question, but it had abandoned service on this line. In 1921, no certificate of the Department for carriage of passengers for hire in motor vehicles was required. In 1926, when the present

law came into being, Pierce applied for and received his present operating rights. The Pierce Line starts at Cleary Square, so-called, at which point it meets an existing bus route of the Metropolitan Transit Authority. The M.T.A. service runs northerly from Cleary Square along Hyde Park avenue to the Forest Hills station of the M.T.A. elevated railway which carries passengers into the center of Boston. The distance from Cleary Square to the center of Boston is between 8 and 9 miles. Under the existing fares of the M.T.A. a passenger may ride from Cleary Square to any point on the M.T.A. system for a fare of 15 cents.

From its beginning point in Cleary Square, the Pierce line runs southwesterly along River street a distance of about a mile and a half to the Boston-Dedham line. It continues beyond this point about a quarter of a mile to the junction of West Milton street, in Dedham, at which point it turns and continues southeasterly along West Milton street across the Boston-Dedham line again to Sprague street, at which point it turns southwesterly down Sprague street to a point near the Boston-Dedham line where the busses turn and go back into a shuttle operation. Pierce's operations beyond the point where River street crosses the Boston-Dedham line are relatively unimportant and the areas so served are either within reasonable distance of River street itself or of other means of transportation. The rate of fare under which Pierce is presently operating over this route is 5 cents. Passengers transferring to or from the Pierce line and using the rapid transit facilities of the M.T.A. at Cleary Square must, therefore, pay a total fare of 20 cents.

At the time that Pierce instituted this service in 1921, he agreed with the municipal authorities that he would abandon service along certain other routes which he started at the same time, if and when the then Boston Elevated Railway agreed to take over these operations. It is his contention that such agreement did not include the route in question which had theretofore been abandoned. We seriously doubt that any of the parties drew such a distinction originally, and we find, for what it is worth, that Pierce's agreement covered the River street line as well as the other routes then initiated. In 1924 the Boston Elevated did take over all routes except the one in question, but failed to operate along River street. Pierce abandoned the other lines in accordance with his agreement but has continued to operate the instant route until the present time. Pierce has no other certificated routes connecting with this operation, although he does operate unrelated bus lines in areas outside the city of Boston.

Under Chap. 405 of the Acts of 1923, the city of Boston bought the lines of the Eastern Massachusetts Street Railway Company in the Hyde Park district and then leased said lines to Boston Elevated Railway which, as we have pointed out, proceeded to operate all such lines except the one now operated by Pierce, as a part of its system at a single rate of fare. By Chap. 398 of the Acts of 1935 the legislature authorized the Boston Elevated Railway to run from Cleary Square to the Boston-Dedham line along River street at certain rates of

fare provided therein. This act was declared unconstitutional by the attorney general. See 1935 A.G. 62. By § 16 of Chap. 544 of the Acts of 1947, the M.T.A. and the city of Boston were deemed to have entered into a contract for the use of the lines of the street railway acquired in 1923 by the city from the Eastern Massachusetts Street Railway Company. By Chap. 572 of the Acts of 1949 title to the street railway lines hereinbefore referred to was vested in the M.T.A. It appears, therefore, that the M.T.A. now owns the abandoned streetcar location along River street from Cleary Square to the Boston-Dedham line together with whatever rights of operation thereon the Eastern Massachusetts Street Railway Company had prior to 1921. This situation does not, of course, obviate the necessity for the M.T.A.'s petition in D.P.U. 8470-Q, since the Eastern Mass. would still have been required to obtain a certificate from the Department for the operation of motor vehicles over this line. G.L. Chap. 161, § 44; Eastern Massachusetts Street R. Co. v. Trustees, 254 Mass 28, PUR1926B 162, 149 NE 628. It does, however, present a consistent legislative plan for operation of the River street line, as well as the other Hyde Park lines formerly of the Eastern Massachusetts Street Railway by the Boston Elevated Company and the M.T.A. It is with this background of expressed legislative intention that we must consider the evidence in this record.

Under the legislation establishing the Metropolitan Transit Authority (Chap. 544 of the Acts of 1947), the city of Boston, including the residents of the Hyde Park district through which River street runs and who are presently served by Pierce, became a part of this new body politic. As such, the city of Boston became liable in certain pro rata amounts for any operating deficits incurred in connection with the activities of the M.T.A. and the owners of the property lying along Pierce's route became liable for taxes based in part upon the existence of such deficits. Operating deficits actually did occur for the year ending December 31, 1948, in the amount of \$8,900,000 and again for the year ending December 31, 1949, in substantial amount which, sooner or later, must be paid by means of such taxes. The taxpayers in Boston, including those in the Hyde Park area, will be required to pay 64⅔ per cent of these deficits. In the meantime, the occupants of such premises along River street are deprived of the benefits of the M.T.A. service to the rest of the city of Boston. If the M.T.A. is licensed to operate over this route, persons wishing to travel from a point beyond Cleary Square to a point short of the Boston-Dedham line will be required to pay a fare of 10 cents as compared with the 5-cent fare now in effect under Pierce's rate schedule. It appears that there are 200 to 300 passengers per day using these intra-line facilities. Most of the travel over River street now originates on the M.T.A. system, in which case a transfer to Pierce's line at Cleary Square is required involving the payment of an extra fare, or originates along Pierce's line destined for points on the M.T.A. system, again involving an extra fare. A universal transfer system is in effect on the M.T.A., whereby the fare for one con-

tinuous ride at the present time never exceeds 15 cents. There are an average of 500 to 700 persons who transfer on week days from the Pierce line to the M.T.A. at Cleary Square. This situation is particularly critical since it involves access to the public secondary schools located near the center of Boston. There are 2,500 to 3,000 adults living on River street between Cleary Square and the Dedham line.

All of the representatives of the public in the area who testified in the proceedings stated that they had been approached by the persons served by Pierce's existing operations to urge that the M.T.A. service be made available to them. The operating results of the M.T.A. may be adversely affected by the extension of its operations from Cleary Square along River street, but the trustees of the M.T.A. are convinced that such increased costs will not be serious and that there are good possibilities of developing additional traffic under the resulting lower fares.

By § 9 of Chap. 544 of the Acts of 1947, the trustees of the M.T.A. are required so to act "as to secure an adequate, coördinated, integrated, and efficient system of rapid transit and the improvement thereof within the area of the cities and towns" constituting this political subdivision. We believe it their duty to operate all rapid transit facilities within that area unless there is good cause shown to the contrary.

We believe that there is adequate evidence in the record under which we should grant to the M.T.A. a license to operate along River street and that such license is in the public interest as that term is used in § 10 of Chap. 544 of the Acts of 1947 as amended.

[1] Once we have arrived at the conclusion that the issuance of a license to the Metropolitan Transit Authority under said § 10 is in the public interest, we are compelled to determine the question as to whether public convenience and necessity now exists under Chap. 159A which requires the continued operation by Pierce of its line under the certificate heretofore granted by the Department. It seems to us obvious that the intention of the legislature in enacting Chap. 159A was to provide a means by which the state could grant an exclusive privilege to a motor carrier to operate over a given route. It has been the policy of the Department ever since the inception of regulation of transportation agencies to prevent competition as between carriers so far as possible. We believe that this is the quid pro quo in consideration of which the carriers submit to regulation of their rates and service. We further believe that the public welfare is best served by a regulated monopoly in the field of passenger transportation as well as in the other fields of public utility operations. See Boston v. Edison Electric Illum. Co. (1922) 242 Mass 305, 136 NE 113; Weld v. Board of Gas & Electric Lighting Comrs. (1908) 197 Mass 556, 84 NE 101.

[2] The Department is authorized by § 7 of Chap. 159A to revoke any certificate of public convenience and necessity granted to a motor vehicle carrier for cause after notice and hearing. We believe that the evidence which requires us to find that it is in the public interest that the M.T.A. furnish service between Cleary Square

and the Boston-Dedham line equally requires us to find that public convenience and necessity do not exist which require the operation by Pierce over the same route. We believe this conclusion is adequately supported by the decision in Burgess v. Brockton (1920) 235 Mass 95, 126 NE 456. See Salem v. Eastern Massachusetts Street R. Co. 254 Mass 42, PUR 1926B 640, 149 NE 671; Boston, Worcester & N. Y. Street R. Co. v. Commonwealth (1938) 301 Mass 283, 17 NE2d 166. By the same token, if Pierce's certificate is revoked in part, we believe that public convenience and necessity no longer requires his operations beyond the intersection of River street and Boston-Dedham line, since such operations constitute only a small part of the existing certificate and would serve no useful purpose as a separate operation. We find that the territory served by Pierce beyond the Boston-Dedham line would be adequately served either by the M.T.A. operations along River street or by other existing transportation agencies.

Pierce has filed in D.P.U. 8852 request for ruling in substance that the evidence does not warrant a finding that cause exists for the revocation of respondent's existing certificate. This request is denied. Pierce also filed in D.P.U. 8470-Q nine requests for rulings, Pierce's request No. 1 is granted. Its requests 2, 3, 4, 5, 6, 7, 8, and 9 are denied. The 10-day limitation provided by § 5 of Chap. 25 upon the Department in dealing with requests for rulings was waived by all parties.

Whouley, Commissioner, dissenting: I cannot in conscience share the opinion of my colleagues that the Metropolitan Transit Authority be granted a license for a route over which to carry passengers on River street between Hyde Park avenue and the Dedham Town Line so as to connect with the system of the Transit Authority.

I am not unmindful of the fact that the people living in the Sunnyside area of Hyde Park may desire this extension of service which will give them a direct connection with the entire Metropolitan Transit Authority system for a single fare of 15 cents. However, it does not seem to me to be just to expect the other patrons of the Metropolitan Transit Authority system to support this extension on the basis of a 15-cent fare when the evidence proves conclusively that the cost of service over this proposed extension cannot possibly be met by a single 15-cent fare.

The difference between revenue which may reasonably be expected from the proposed extension and the cost of service must be made up from the revenues derived from the system generally, a result which I do not believe the present financial condition of the Metropolitan Transit Authority warrants, and is therefore not consistent with the general public interest.

It does not appear that the Metropolitan Transit Authority or its predecessor, the Boston Elevated Railway Company, ever operated over the proposed route. On the other hand, the area affected has been served for about twenty-nine years by Pierce Bus Lines, Inc. Obviously, the granting of this petition will have the effect of putting this company out of business in this area. While that of itself may not be the controlling consideration, I

find it to be an important one, especially as this company has served the area well for over a quarter of a century.

In determining that the public interest is being served by this change, I suspect the majority has been unduly influenced by the saving of fare money to a very small segment of the M.T.A. population and has mistaken the special interest of these few for the public interest. In recommending this change the public generally suffer as against a small saving to a relatively few. Inaugurating or extending nonprofit service to a few, with other service presently available, at the expense of the whole is unsound and dangerous and ought not to be encouraged.

The broader implications of the majority opinion are not to be overlooked. Many transportation services connecting with the system of the Metropolitan Transit Authority have been built up over a period of years. From time to time, no doubt, the Transit Authority may wish to extend its system into areas now served by such other transportation services. Are those services to be wantonly put out of business without any compensation whenever the Metropolitan Transit Authority seeks to extend its system into an area served by them without regard to whether or not such extensions may prove to be profitably operated on the basis of a single fare presently charged by the Transit Authority?

The precedent which the majority decision establishes is, in my judgment, an unjust and unsound one.

GEORGIA PUBLIC SERVICE COMMISSION

Re Interstate Telephone Company

File No. 19398, Docket No. 7-U
March 27, 1950

APPLICATION *of telephone company for authority to issue and sell first mortgage bonds; approved.*

Valuation, § 67 — Book value — Original cost.

1. Book value of telephone plant and equipment should reflect the actual investment in such property at the true original cost, estimated if not known, p. 154.

Valuation, § 74 — Original cost.

2. The Commission will not substitute appraised value for original cost without first verifying that such appraised value represents a reasonable estimate of original cost, p. 154.

Accounting, § 8 — Book cost — Adoption of value for rate making.

3. The fact that the Commission may adopt a particular value for rate-making purposes does not of itself authorize the placing of such value on the books of the company, p. 154.

Accounting, § 56 — Restatement of value — Commission approval required.

4. Commission approval is required before any increase in a utility's plant account resulting from a restatement of value is carried into the utility records, p. 154.

Security issues, § 57 — Purpose of first mortgage bonds — Use for conversion expense.

5. A telephone company was authorized to issue and sell first mortgage bonds to refund indebtedness incurred in conversion to automatic dial operation and to pay for additional construction expenditures and financing expense, p. 155.

APPEARANCES: Cam B. Lanier, President, for the Company; N. Knowles Davis, Chief Engineer, for the Commission.

By the COMMISSION: On March 17, 1950, Interstate Telephone Company filed an application with the Commission requesting authority to issue and sell $175,000 principal amount of first mortgage bonds, 3½ per cent series, maturing in 1970. On receipt of the application, the Commission directed the company to cause notice of the application and the scheduled hearing thereon to be published in the Valley Daily Times-News, and it appears that proper notice was published. There were no appearances at the hearing in opposition to the application.

According to the application and testimony adduced at the hearing, the Interstate Telephone Company proposes to issue and sell the above bonds to J. H. Hilsman & Company, Inc., Atlanta, Georgia, for the principal amount thereof, plus accrued interest and from the proceeds of the sale the company proposes to pay $5,250 or 3 per cent of the principal amount as a commission to the brokers for handling the issue, said commission to include paying for the cost of placing the bonds, the expenses of having the bonds prepared, and the legal expenses of having the mortgage and trust indenture drawn by attorneys for the broker. It is stated that no other items of expense will be incurred other than the standard banking charge to be made by the Citizens and Southern National Bank for acting as trustee, and for paying coupons on the bonds as they mature from funds furnished by the Interstate Telephone Company.

According to the evidence and the record in this case, the company proposes to use the proceeds from the sale of these bonds for the following purposes:

Refunding current bank loans	$70,000
Payment of loans from others	66,100
Additional construction expenditures	33,650
Expense of issue	5,250
Total	$175,000

It is alleged that substantially all of the above current indebtedness was incurred in order to obtain necessary funds with which to convert the Interstate Telephone exchange to automatic dial operation, as well as to enlarge, modernize, and extend the local telephone system.

The Commission understands that no restrictions are to be placed in the mortgage with reference to the $33,650 of funds to be used for additional

construction and that when the issue is sold, the entire proceeds from the issue are to be turned over to the company, but that reports of construction from the funds available are to be given to the trustee at regular intervals. It appears that either a copy of said reports or similar reports should be mailed to the Commission, and this order will so provide.

An exhibit presented in this case sets forth the balance sheet of the Interstate Telephone Company as of January 1, 1950, and a pro forma balance sheet as of the same date, giving effect to the issuance of the proposed first mortgage bonds. This balance sheet is shown below:

Assets	January 1, 1950	Pro Forma
Telephone Plant	$544,324.00	$544,324,00
Materials and Supplies	22,450.00	22,450.00
Cash in Bank	—	33,650.00
Expense on Long-term Debt	—	5,250.00
	$566,774.00	$605,674.00
Liabilities		
Capital Stock	$100,000.00	$100,000.00
Bonds	—	175,000.00
Notes Payable (Bank)	70,000.00	—
Notes Payable (Other)	66,100.00	—
Depreciation Reserve	46,793.00	46,793.00
Surplus—By appreciation	262,818.77	262,818.77
Paid in	21,062.23	21,062.23
Total Liabilities	$566,774.00	$605,674.00

[1-4] With respect to the Surplus item "By appreciation" in the amount of $262,818.77, the company states that this represents the establishment on the books of the company of a value derived by a recent appraisal of the property. The company alleged further that plant account records have not been kept properly in the past and, as a result, the full investment of the company in its plant and equipment was not reflected on the books. For this reason, the company took the position that the book value of the property should be increased to reflect the appraised amount. In support of this action the company referred to the recent rate case before the Commission when the said appraisal was introduced as evidence as to the value of its property.

Book value of telephone plant and equipment should reflect the actual investment in such property at the true original cost, estimated if not known. It is possible that the appraised value used represents a reasonable estimate of the original cost, but this has not been verified by the Commission. Furthermore, the fact that the Commission may adopt a particular value for rate-making purposes does not of itself authorize the placing of such value on the books of the company. It further appears that any increase in plant accounts of any utility resulting from a restatement of values must require Commission approval before being made. Although this order will authorize the securities as requested, this shall not be construed as approval by the Commission of the establishment of the values on the books of the company as set forth in the exhibit in

this proceeding. The Commission will entertain an application from the company for authority to restate plant values and after a review of such records as are available as well as evidence presented in cases before the Commission, and will ascertain what restatement of plant accounts is proper.

[5] After careful consideration of the application of the company for authority to issue securities, it is the opinion of the Commission that the authority prayed for falls within the spirit of § 93-414 of the 1933 Code of Georgia, and should be approved. Wherefore, it is

Ordered that Interstate Telephone Company be, and the same is hereby authorized to issue and sell $175,000 principal amount of first mortgage 3½ per cent series bonds to be dated March 1, 1950, with semiannual interest payable June 30th, December 31st, and to mature December 31st as follows: $7,000, 1951 to 1954 inclusive; $8,000, 1955 to 1959 inclusive; $9,000, 1960 to 1962 inclusive; and $10,000, 1963 to 1970 inclusive, both principal and interest to be payable at the Citizens and Southern National Bank, Atlanta, Georgia, said bonds to be sold for not less than 100 per cent of the principal amount thereof, plus accrued interest.

Ordered further that the total expense of this issue excluding trustee's charges shall not exceed 3 per cent of the principal amount thereof, or $5,250.

Ordered further that Interstate Telephone Company shall make monthly reports of construction expenditures from the proceeds of this issue, setting forth in detail the purposes for which expenditures are made until such time as total expenditures so reported equal or exceed $33,650.

Ordered further that the authorization of the issuance of the bonds herein shall not be construed as approval by the Commission of restatement of plant accounts of the Interstate Telephone Company.

Ordered further that it shall not be incumbent upon the purchasers or takers of the bonds to see that the provisions of this order are complied with, but that this responsibility shall rest solely with the Interstate Telephone Company.

Ordered further that the Commission retains and keeps jurisdiction over this matter for such further action as may seem meet and proper.

Tela-News Flash, Incorporated
v.
District Attorney of Queens County et al.

— Misc —, 96 NYS2d 338
March 31, 1950

PROCEEDING *by news service against district attorney, police, and telephone company to compel service continuance; petition dismissed.*

Injunction, § 21 — Against action of law enforcement authority — Restraint on gambling — Telephones.

1. A court of equity will not interfere to prevent action by law enforcement officials to curtail dissemination of gambling information by telephone where such officials have reasonable grounds for believing that violations of law are being committed, p. 156.

Service, § 134 — Telephone discontinuance — Gambling.

2. A telephone company is justified in discontinuing service to a patron which, in violation of law, is engaged in aiding and abetting bookmakers by furnishing horse-racing information to subscribers, p. 158.

APPEARANCES: Matthew H. Brandenburg, New York city, for petitioner; Charles P. Sullivan, District Attorney of Queens county, pro se, J. Irwin Shapiro, Long Island City, of counsel for respondent; Ralph W. Brown, New York city, for respondent New York Telephone Co., Irving W. Young, Jr., New York city, of counsel; John P. McGrath, Corporation Counsel, New York city, for William P. O'Brien, Commissioner of Police of City of New York, Saul Moskoff and Leonard E. Katlin, New York city, of counsel.

HOOLEY, J.: Motion to compel the respondent New York Telephone Company to continue its services to petitioner and that the other respondents, to wit, the district attorney of Queens county and the police department of the city of New York be restrained from interfering in any manner whatsoever with the petitioner in the operation of its business.

[1] In so far as the motion seeks to restrain the district attorney of Queens county and the police department of the city of New York from interfering with the petitioner in the operation of its business, the motion is denied. It is well settled that if the police or district attorney have reason-

able grounds for believing that violations of law are being or may be committed, equity will not interfere with action by them designed to prevent the commission of crime. It has been repeatedly held that the court should not interfere with the reasonable exercise of discretionary power of public officials. Doolittle v. Supervisors of Broome County (1858) 18 NY 155, 163; Message Photo-Play Co. v. Bell (1917) 179 App Div 13, 20, 166 NYS 338, 343. There is every presumption in favor of the reasonableness of the acts of public officials in actions taken for the general welfare, and it is presumed that a public official does not act contrary to his official duty. Re New York (in Re Ely Avenue) (1916) 217 NY 45, 111 NE 266; Hood v. Guaranty Trust Co. of New York (1936) 270 NY 17, 28, 200 NE 55, 60; Re Whitman (1918) 225 NY 1, 9, 121 NE 479, 481; Hamilton v. Erie R. Co. (1916) 219 NY 343, 350, 114 NE 399, 402, Ann Cas 1918A 928.

Neither will the court interfere with the discontinuance of telephone service if it appears that such service has been used in connection with the commission of crime.

It appears in this case that the business and directing manager of petitioner, Tela-News Flash Inc., is one described in its racing publication, the Daily Oracle, as Anthony Arnold. Upon the argument it was conceded by petitioner that Anthony Arnold is, in truth and in fact, one William Annette who has applied on two former occasions for relief almost exactly similar to that sought here. See Annette v. New York Teleph. Co. (1945) 74 NYS2d 330, affirmed (1948) in 273 App Div 997, 79 NYS2d 896. In that case, decided in 1945, Mr. Justice Miller said concerning said Annette: "His method of obtaining the information and his method of conducting his business were unusual; they were not as men ordinarily do, and leave no doubt that he was engaged mainly, if not solely, for the purpose of aiding bookmakers in their activities."

Annette, thereafter, in 1947 made an application in Queens county for an order directing the New York Telephone Company to furnish telephone service. The court there found that petitioner was engaged in substantially the same business as that in which he was engaged at the time of the decision of Mr. Justice Miller. See Annette v. New York Teleph. Co. (1947) 72 PUR NS 189, 74 NYS2d 331.

On the papers presented upon this application the court is again confronted with substantially the same line of business as came before the court in the aforementioned applications cited above. What Annette did after the two prior reported decisions was to change his name, the location of his business and the name of the racing sheet, and introduce a new corporate name as the publisher thereof, and the New York Telephone Company was led into furnishing service which it had twice before refused to continue and which refusal the courts had held proper.

The district attorney of Queens county obtained from the county court of Queens county an order pursuant to § 813-a of the Code of Criminal Procedure permitting the interception of communications passing through petitioner's phones. As a re-

sult of such interception of communications a conference was held between officials of the district attorney's office, the police department, and the New York Telephone Company, at which the representatives of the telephone company were informed that the district attorney and the police commissioner were of the opinion that the telephone services in question should be discontinued because the same were being used as an aid to gambling activities.

[2] The records of the interceptions submitted to the court confirm the belief of the court that the telephones in question have been used for gambling purposes. That such evidence may be properly used herein is clear under the decision in Harlem Check Cashing Corp. v. Bell (1946) 296 NY 15, 68 NE2d 854.

Furthermore, aside from the evidence of intercepted messages there can be no doubt that the service is one used to aid gambling activities. Section 986 of the Penal Law expressly declares that it is a misdemeanor to aid or abet another in bookmaking. The fact that the petitioner charged $60 per week for its services in furnishing horse racing information to its subscribers is clearly indicative that the service was to aid and abet bookmaking. On the argument herein, petitioner's counsel conceded that its service was quite unique in that they were able to furnish the results of horse races immediately after the race had been run. He sought to argue that this information was of value to bettors in that they would be in a position to again risk their winnings on the first couple of races on the subsequent races to be run that day. The plain fact is that unless one were to bet at a pari-mutuel track where betting is legal, there is no way for a bettor who desires to wager on horse racing other than to do business through bookmakers. It is clear that no individual would pay $60 per week for this service while attending the race track. The service, however, would be of real value to a bookmaker and to his patrons because if the patrons should win in the early races they might easily be encouraged to make bets on subsequent races on the same day.

The petitioner has wholly failed to show a clear legal right to the relief which he seeks. On the contrary, the record clearly shows that upon the merits of the application, the action of the telephone company was thoroughly justified and its action in curtailing service should not be disturbed.

If the respondents, the district attorney of Queens county and the police department of the city of New York desire that the complaint as against them be dismissed, they should make formal application therefor.

The petition is, in all respects, dismissed.

Paper Arts Company, Incorporated

v.

Indianapolis Railways, Incorporated

No. 20885
April 20, 1950

COMPLAINT *to recover overcharges for transportation of complainant's employees; denied.*

Reparation, § 15 — Charges under special agreement — Transportation.

A paper company's action against a transportation company for reparation for alleged overcharges for transporting employees under an oral agreement should be dismissed where there was no violation of any contract, fares, rules, or regulations lawfully on file with the Commission pertaining to the services rendered.

By the COMMISSION: On May 12, 1949, the Public Service Commission of Indiana approved an order dismissing the proceedings in the above-entitled cause wherein Paper Arts Company, Inc., complainant, prayed that this Commission issue an order directing Indianapolis Railways, Inc., to pay complainant, Paper Arts Company, Inc., the sum of $3,322.04 with interest thereon at 6 per cent per annum, as overcharges as defined by § 6, Chap 222, Acts 1941, Burns § 47–1225 a(e).

Thereafter, on June 9, 1949, 79 PUR NS 60, the Commission approved an order in the above-entitled cause denying, overruling, and holding for naught complainant's petition for reconsideration and/or oral argument filed with the Commission on May 20, 1949.

Upon further consideration of complainant's petition for consideration and/or oral argument filed on May 20, 1949, the Commission was of the opinion and found that said request should be granted and its order approved on May 12, 1949, and June 9, 1949, should be set aside and oral argument granted.

Thereafter, on September 28, 1949, said oral argument was held in the rooms of the Commission, 401 State House, Indianapolis, Indiana.

At the time of oral argument it was shown and the Commission's investigation substantiates the fact that there was a certain oral agreement entered into between Indianapolis Railways and Paper Arts Company. The oral agreement was in part that Indianapolis Railways would provide a motor coach beginning Monday through Friday, leaving point of origin, namely, "Circle" at a specified time in the morning, arriving at a point of destination, namely, "34th & Arlington

(Paper Arts Co. Plant)" at a specified time in the morning. Said motor coach to arrive at "34th & Arlington (Paper Arts Co. Plant)" at a specified time in the evening and leave "34th & Arlington" at a specified time in the evening, bus to be marked "Paper Arts Co."

The Paper Arts Company was to be billed on a cost per mile basis and given credit for fares collected at the current tariff in effect.

The contract or oral agreement entered into at the time the services in question were performed was never filed with this Commission.

It is the contention of the plaintiff that inasmuch as passengers other than those traveling from and to Paper Arts Company were transported on the same vehicle that an overcharge was made on the part of Indianapolis Railways.

One of the factors to be taken into consideration was the services rendered by respondent in the nature of special, charter, or common carrier service.

At the time of oral argument there was no mention made nor do the facts reveal that the motor coach in question was to be used for the sole exclusive purpose for transportation of Paper Arts Company employees only.

Taking into consideration that there was an agreement between the parties involved for the transportation of passengers for the plaintiff at a fixed agreed charge, other than respondent's established charge that appeared in its tariff at the time the services were rendered, this is construed to be a special service.

The most salient factor that the plaintiff bases its argument on is that the respondent was demanding and receiving additional compensation for the same service different and greater than prescribed in its tariff.

The Commission records do not disclose that the respondent Indianapolis Railways filed with the Commission a tariff or a contract naming fares for the special services hereinbefore referred to, therefore there were no violations of any fare, rule, or regulation lawfully on file with the Commission.

The Commission is of the opinion and finds that inasmuch as there was no contract filed with it between respondent and complainant nor a tariff setting out fares, rules, and regulations for the performance of the transportation services involved, that no violation of a tariff or contract was made in so far as the Commission is concerned, and that petition filed by complainant and allegations presented at time of oral argument should be denied and it will be so ordered.

It is therefore *ordered* by the Public Service Commission of Indiana that petition filed by complainant, Paper Arts Company v. Respondent, Indianapolis Railways, for reparation together with allegations as presented in oral argument be and the same are hereby denied, and this matter is hereby closed of record.

Industrial Progress

A digest of information on new construction by privately managed utilities; similar information relating to government owned utilities; news concerning products, supplies and services offered by manufacturers; also notices of changes in personnel.

Electric Companies Plan Intensive Lighting Promotion

SEVENTY-NINE electric companies, representing 93 per cent of those replying to a survey made by the National Promotion Committee of the Planned Lighting Program, will conduct lighting sales programs during the latter part of 1950, Jos. S. Schuchert, chairman of the committee, has announced.

Of these companies, 96 per cent will stress commercial lighting promotion; 82 per cent will include promotion of home lighting; 90 per cent, industrial lighting; and 73 per cent, farm lighting, he said. The survey was made throughout the United States, by regional chairmen of the National Promotion Committee.

Remington Rand Booklet Describes Economy Files

REMINGTON RAND'S new line of low-priced "Revere" file cabinets is described at length in an introductory booklet recently issued by that company.

The new files, according to the brochure, contain many of the same advantages of durability and fine craftsmanship found in the premium-grade "Aristocrat" cabinets, yet are designed especially for those filing operations in which economy is a major factor.

Available in three-, four-, or five-drawer cabinets, and with either letter or legal sized drawers, the files are extremely flexible in that substitute drawers may be employed to accommodate variously sized cards, documents or miscellaneous material in box drawers. The files can also be readily equipped with special devices such as Flexi-File, a unique system of linen "hammocks" which prevent filed papers from slumping.

The booklet, identified as LBV 538, may be obtained from any Remington Rand branch office, or by writing to the company's home office at 315 Fourth avenue, New York 10, New York.

Flexible Rubber Pipe Bulletin Issued

THE Hewitt Rubber Division, Hewitt-Robins Inc., has just issued an 8-page bulletin explaining the applications and comparative qualities of flexible rubber pipe as against metal pipe in many services, exclusive of long lines. Economies in costs of installation and maintenance as well as longer life are explored in detail. A progressive picture story, occupying two pages, shows the greater use of installation claimed for the rubber product. Copies of Bulletin No. H-1 are available by writing to Hewitt Rubber Division, Hewitt-Robins Incorporated, 240 Kensington avenue, Buffalo 5, New York.

Perfection Introduces Hydraulic Lift End Gate

THE PERFECTION STEEL BODY COMPANY of Galion, Ohio, has perfected a combination hydraulic lift end gate for trucks hauling heavy or bulky cargo. Known as the Cobey Hydra-Power End Gate, it can be installed on any make or model truck with suitable body type, and is operated from the truck power take-off.

It is claimed that by the use of the Cobey Hydra-Power End Gate, one man can load and unload heavy cargo in but a fraction of the man-hours ordinarily required by two or more men using manual methods; also helps to reduce employee injuries and cargo damage in loading and unloading operations.

The manufacturer emphasizes that not only the lifting but also the closing of the gate is accomplished by hydraulic power. One of the most important features of the new Cobey unit is the use of only one hydraulic cylinder for all operations connected with the lowering, raising, and closing of the gate. This feature is said to reduce installation cost.

1,500,000 Gas Ranges Goal For Old Stove Round Up

PLANS for an accelerated, nationwide "Old Stove Round Up" aimed at promoting the sale of 1,500,000 gas ranges with a dealer value estimated at $250,000,000, were announced recently.

The annual Old Stove Round Up, sponsored jointly by the American Gas Association and the Gas Appliance Manufacturers Association will officially open September 1, 1950. It is expected that the coördinated efforts of the two associations, 600 gas utility companies in the United States and Canada, 42 range manufacturers, 30,000 appliance dealers, and 2,000 liquefied petroleum dealers, will lift the sales of modern, automatic gas ranges to new high levels.

Nearly one million dollars in national advertising, and six million dollars in local advertising, it is estimated, will support the Old Stove Round Up.

Gas utility companies using their own sales promotion programs during the Round Up will spearhead the campaign. Gas range dealers

(*Continued on page* 22)

throughout the nation will be invited to participate in these local programs. AGA and GAMA will furnish extensive advertising, sales promotion, and publicity support. AGA will provide a special brochure detailing new plans for the Old Stove Round Up. This brochure will be mailed to utilities and manufacturers with suggestions for a complete promotional program.

The chief aim of the 1950 Round Up will be to corral, retire, and replace obsolete gas ranges now in use and to impress upon homemakers the advantages and economy of modern automatic gas ranges. More than 60 per cent of the gas ranges in use have had ten years or more service.

New "Hypot" High Potential Insulation Breakdown Tester

A NEW, semi-portable series of "Hypot" high potential insulation breakdown testing instruments, with test voltage ranges up to 30,000 VAC and capacities to 1.65 KVA is being manufactured and sold by Associated Research, Incorporated, 3755 W. Belmont avenue, Chicago 18, Illinois. Designated as 570 Series "Hypots," the new models fill the gap in output capacities between the company's portable "Hypot" Juniors and 500 Series Mobile "Hypots."

Associated Research bulletin 5A contains details and specifications.

Honeywell Expands Output Into Power Stations Industry

MINNEAPOLIS-HONEYWELL REGULATOR COMPANY is expanding its production and promotion activities into the field of central power station instrumentation, it was announced recently. Charles W. Bowden, of Honeywell's Brown division, has been named central stations' industry manager.

More than a dozen new products have been designed for central power station applications, Mr. Bowden said. They include instruments and pyrometer accessories for steam plants and electric distribution. A nationwide promotion of the new products will follow private showings.

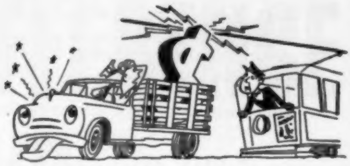
The new line covering steam plant installations includes multi-point thermocouple pyrometers, resistance thermometers, high and low resistance bulbs, single-point Kelvin bridge recorders, single- and multi-point conductivity recorders, pressure and liquid level recorders, pneumatic transmitters for various variables and electric transmitters.

Goddard to Head Sylvania National Lighting Accounts

CHARLES H. GODDARD will assume responsibility for national accounts sales in the Lighting Division of Sylvania Electric Prod-

(*Continued on page* 24)

Are high hauling costs short-circuiting profits?



Switch to economical DODGE "Job-Rated" trucks!

You can get a direct "line" to lower hauling costs by investing in an economical Dodge "*Job-Rated*" Truck!

Such a truck will have an engine that's "*Job-Rated*" to give you power to spare. Along with this extra power, you'll get maximum gas and oil economy!

Every other chassis part will also be "*Job-Rated*" —engineered and sized to fit your job. Your Dodge Truck will cost you less to operate!

If your hauling is in heavy city traffic, you'll be pleased with the ease of handling of your Dodge "*Job-Rated*" Truck. If you go where roads are bad—or where there are no roads at all—you'll like the power and dependability of your Dodge "*Job-Rated*" Truck.

If high hauling costs are "short-circuiting" your profits, switch to economical Dodge "*Job-Rated*" trucks. See your Dodge dealer today!

With all their extra value DODGE "Job-Rated" TRUCKS are priced with the lowest

ucts, Inc., it was anounced recently by B. K. Wickstrum, general sales manager. Mr. Goddard will also continue in his present capacity as manager of utility sales. In this new position, he will be in charge of sales of all lighting equipment for large accounts throughout the country.

Folder Describes Chemical Construction Materials

THE Atlas Mineral Products Company announces the publication of their new General Bulletin MCC No. 1. This bulletin briefly describes Atlas' complete line of chemical construction materials, including: corrosion-proof linings, corrosion-proof cements, acid-proof brick and tile, corrosion-proof brick sheathings, corrosion-proof protective coatings and corrosion-proof floors. It also includes handy estimating data. Write to 42 Walnut street, Mertztown, Penna., for a copy.

Rockwell Names Dixon Asst. V. P. of Meter & Valve Div.

W. F. ROCKWELL, JR., president of Rockwell Manufacturing Company has announced the appointment of L. A. Dixon, Jr. as assistant vice president of the company's meter and valve division. He will assist in the coördination of sales and factory problems and make his headquarters at the company's home office in Pittsburgh. For the past two years he has been the general manager of the Pittsburgh-DuBois division of Rockwell.

New Bulletin on Kennedy Pipe Fittings

THE KENNEDY VALVE MFG. COMPANY, Elmira, New York, offers the new Bulletin 104, which describes the complete line of Kennedy cast iron, malleable and bronze fittings. It covers the recent additions of cast-iron screwed, flanged, sprinkler and extra-heavy malleable fittings to the line, which, according to the manufacturer, makes it one of the most complete and extensive in the industry.

IBM Issues Several New Folders

INTERNATIONAL BUSINESS MACHINES CORPORATION has released literature describing some of its most recent developments.

Available on request are the following bulletins: IBM Accounting Machines (Bulletins Nos. 52-8137-0 and 52-8139-0); IBM Electric Formswriter (No. 55-8148-0); IBM Electrographic Ink (No. 52-8142-0); IBM Card Verifier (No. 52-8135-0); and IBM Time Stamp (No. 53-8143-0).

Copies of the above booklets may be obtained from the manufacturer, 590 Madison avenue, New York 22, N. Y.

THERE'S A BIG DIFFERENCE IN TRUCKS

—AND HERE'S THE PROOF

TRUCK BUYER'S GUIDE
½ TO 2 TONS

How leading makes of trucks compare in twelve major features that insure greater dependability, longer life and lower maintenance.

FEATURES	GMC TRUCK	TRUCK "A"	TRUCK "B"	TRUCK "C"	TRUCK "D"
Power and efficiency of VALVE-IN-HEAD ENGINE	YES	YES	NO	NO	YES
LEADS IN NET HORSEPOWER	YES	YES	NO	NO	YES
LEADS IN SUSTAINED TORQUE	YES	NO	NO	NO	NO
FULL-PRESSURE LUBRICATION of all main bearings and piston pins	YES	NO	NO	NO	YES
SYNCHRO-MESH TRANSMISSION with Cushion Disc Clutch	YES	YES	Some Models	YES	YES
Easy-Turn Recirculating BALL-BEARING STEERING GEAR	YES	YES	NO	NO	NO
SEPARATELY MOUNTED FENDERS, GRILLE AND RADIATOR for economical repair	YES	NO	NO	NO	NO
TORSIONAL DAMPENER for engine smoothness	YES	YES	YES	NO	YES
BUILT-IN RADIATOR EXPANSION TANK — prevents coolant loss	YES	NO	NO	NO	NO
DOUBLE-WRAPPED FRONT SPRING EYES for front axle stability	YES	YES	Some Models	NO	NO
TOCCO-HARDENED CRANKSHAFT Dynamically balanced	YES	NO	NO	NO	NO
STEEL-BACKED AIRPLANE TYPE MAIN AND ROD BEARINGS	YES	NO	NO	NO	NO

COMPARE the extra-value, extra-service features you get only in GMC trucks and you'll understand why they deliver more miles — with lowest maintenance and repair costs. They're real trucks — truck-built from bumper to taillight. See for yourself—get the story from your GMC truck dealer.

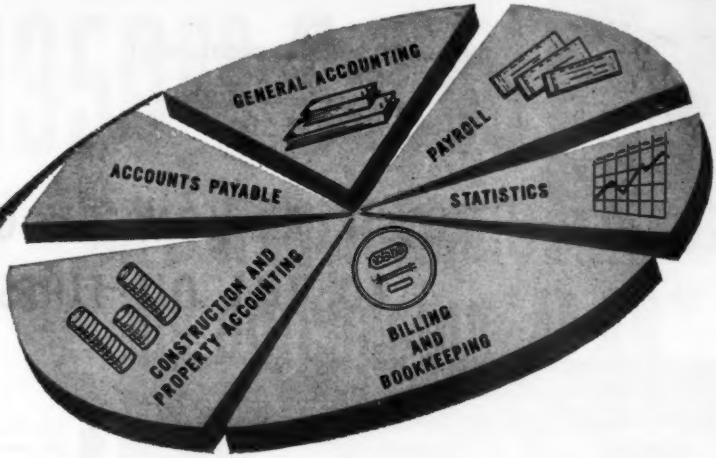
GMC TRUCK & COACH DIVISION
General Motors, Pontiac, Michigan

GMC GASOLINE & DIESEL TRUCKS
FROM ½ TO 20 TONS

GM GENERAL MOTORS

YOUR KEY TO GREATER HAULING PROFITS

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



Complete the whole job

WITH AUTOMATIC IBM ACCOUNTING

Many utility companies have discovered that IBM Accounting does the complete job with its all-purpose machines, handling Payroll, Accounts Receivable, Accounts Payable, and all other accounting and statistical functions. The same automatic IBM machines, operated by the same personnel, produce all the reports, analyses, bills, paychecks, and records needed.

IBM developments have lightened the burden of all utility accounting and made it a fast, efficient operation. Send the coupon or call the local IBM office today for full information.

IBM, Dept. D
590 Madison Avenue, New York 22, N. Y.
Please send me your booklet, "General Accounting for Electric, Gas and Water Utilities."

Name____________________

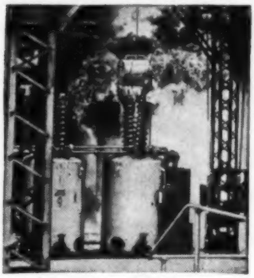
Company____________________

Address____________________

IBM

INTERNATIONAL BUSINESS MACHINES CORPORATION

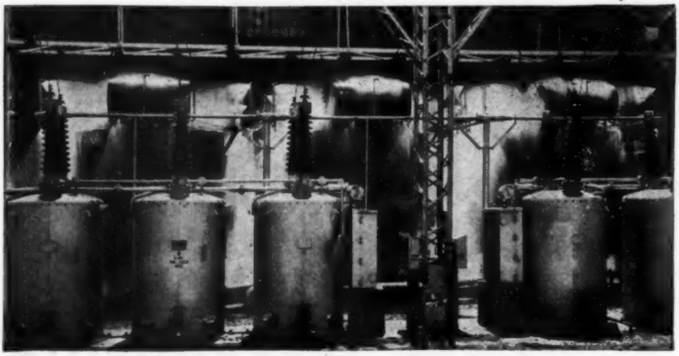
This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



WITHOUT SPECIAL PROTECTION

This transformer fire did $50,000 damage at an electric power station.

MULSIFYRE NOW ON GUARD TO KILL OIL FIRES FAST



Transformers at this electric power station are now safeguarded by a Grinnell Mulsifyre installation. Fast, automatic spray action is being demonstrated here.

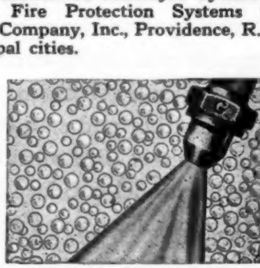
When an oil fire breaks out in transformers protected by a Mulsifyre system, a battery of spray projectors puts out the fire . . . fast. Automatic, heat-actuated release devices assure quick operation. Extinguishment occurs within a few seconds after the emulsion-forming spray strikes the surface of the burning oil.

Mulsifyre projectors are approved by Underwriters' Laboratories, Inc. for extinguishing fires in flammable oils immiscible with water, wherever such oil is a fire hazard. There is no conductivity along the discharge of a Mulsifyre projector when the spray strikes conductors carrying high voltages.

Mulsifyre high-velocity projectors produce drops large enough and drive them fast enough to penetrate the flames without complete vaporization in flight, but limit their velocity so the surface of the burning liquid is agitated into an emulsion instead of passing through the oil without fire-extinguishing effect. After a period of time, the emulsion breaks down, oil and water separate, and the oil can be reclaimed.

Mulsifyre systems have proven their effectiveness during sixteen years of extinguishing transformer fires. Today they protect hundreds of installations all over the world.

For information on Mulsifyre Systems or other Grinnell Fire Protection Systems write to: Grinnell Company, Inc., Providence, R. I. Offices in principal cities.



GRINNELL *Mulsifyre*

EMULSION—EXTINGUISHMENT OF OIL FIRES

CONTROL CORROSION!

reduce hidden costs . . .
above ground and below!

Today's corrosion rate is alarmingly high! **Unless you have adequate control, your business is incurring unnecessary losses. Either *directly*—due to high maintenance costs and replacement of corroded equipment; or *indirectly*—through losses due to idle equipment, loss of product and plant efficiency.**

EBASCO corrosion control consulting services are applicable to:

1. **All buried or submerged metallic structures—oil, water, gas pipelines and cables—both cross country and urban.**
2. **Manufacturing, processing and power plants—either on existing facilities or proposed new structures.**

These services include a preliminary survey to determine causes of corrosion; recommendations for corrective measures; design and installation of corrosion control methods; and development of a permanent corrosion control program.

EBASCO can help you develop *your own* corrosion control program.

EBASCO specialists not only can help you spot and remedy specific corrosion troubles—but can train your own personnel in setting up *your own corrosion control program*—so you can continue to keep down these "hidden" costs.

Remember . . . corrosion control is something you can't afford to put off. Call in EBASCO specialists—find out what they can do to help you protect your structures now, and for years to come.

Write for the booklet "*The Inside Story of Outside Help*" describing the many EBASCO services available to you. Ebasco Services Incorporated, Dept. W, Two Rector Street, New York 6, N. Y.

ENGINEERS · CONSTRUCTORS
EBASCO
BUSINESS CONSULTANTS

- Appraisal
- Budget
- Business Studies
- Consulting Engineering
- Design & Construction
- Financial
- Industrial Relations
- Inspection & Expediting
- Insurance & Pensions
- Purchasing
- Rates & Pricing
- Research
- Sales & Marketing
- Systems & Methods
- Taxes
- Traffic

EBASCO SERVICES INCORPORATED

NEW YORK • CHICAGO • WASHINGTON, D. C.

Ebasco Teamwork gets things done anywhere in the world

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants, and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design, and construction. » »

Mention the FORTNIGHTLY—*It identifies your inquiry*

PROFESSIONAL DIRECTORY (*continued*)

GILBERT ASSOCIATES, Inc.

POWER ENGINEERING SINCE 1906

Serving Utilities and Industrials

Reading • New York • Houston

Philadelphia • Washington

ENGINEERS
Steam, Electric, Gas
Hydraulic, Sanitation
Designs and Construction
Inspections and Surveys
Feed Water Treatment

SPECIALISTS
Purchasing and Expediting
Rates, Research, Reports
Personnel Relations
Original Cost Accounting
Accident Prevention

HENKELS & McCOY

Electric & Telephone Line Construction Company

CONTRACTORS

PHILADELPHIA

Wilmington, Del. • Portland, Me. • Altoona, Pa.

NOW WORKING IN FOURTEEN STATES

TRANSMISSION DISTRIBUTION
OVERHEAD UNDERGROUND
CONSTRUCTION MAINTENANCE
BALL FIELD LIGHTING

RIGHT OF WAYS
CHEMICAL CONTROL
TREE TRIMMING
GAS AND OIL LINES

HOOSIER ENGINEERING COMPANY

Erectors of Transmission Lines

1384 HOLLY AVENUE • COLUMBUS, OHIO

The **Kuljian** *Corporation*

ENGINEERS CONSTRUCTORS

1200 NORTH BROAD STREET, PHILADELPHIA 21, PA.

SPECIALISTS IN UTILITY, CHEMICAL, AND INDUSTRIAL FIELDS

Washington, D.C. • St. Petersburg, Fla. • Rome • Calcutta • Caracas

---

WILLIAM S. LEFFLER

Engineers Associated

Management Consultants

Cost Analyses for Rate Revisions — Regulatory and Municipal Problems

Rate and Sales Research for Increased Operating Income

NOROTON — CONNECTICUT

LOEB AND EAMES

Public Utility Engineers and Operators

Ice and Refrigeration

Valuations, investigation reports, design and supervision of construction

57 WILLIAM STREET — NEW YORK

(*Professional Directory Continued on Next Page*)

PROFESSIONAL DIRECTORY (*continued*)

PROFESSIONAL DIRECTORY (*concluded*)

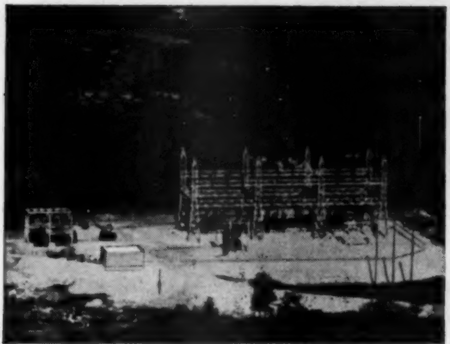
INDEX TO ADVERTISERS

[The Fortnightly lists below the advertisers in this issue for ready reference. Their products and services cover a wide range of utility needs.]

*Fortnightly advertisers not in this issue.

In one of the country's newest and most modern substations...

EXIDE-MANCHEX BATTERIES



New Hudson Substation of Public Service Company of New Hampshire, a unit in the company's large expansion program. (Photo by P.S.Co. of N.H.)

Bank of 60 Exide-Manchex EME-11 Batteries in new Hudson Station.

The new Hudson Substation of Public Service Company of New Hampshire is one of the most efficiently designed and equipped in the country. It's on the Nashua terminus of a 115-kv transmission line from the recently constructed Schiller Mercury Steam Generating Station. Also, it is a terminus of a power exchange across the Massachusetts border.

In the battery room is a 60-EME-11 Exide-Manchex Battery, which is used for switchgear operation, emergency lighting and communication. Considered in its selection were its fine service record and many outstanding features, which include:

- the famous manchester positive plate with its *exclusive* lead button construction.
- slotted plastic separators, impervious to chemical and electrical reaction.
- plastic spacers that maintain plate alignment.
- the latest development in molded glass jars.
- heavy terminal posts with copper inserts for extra conductivity.

Combined, these and other outstanding characteristics assure you of *positive* switchgear operation. Use the Exide-Manchex for all stationary battery applications in central and substation service.

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia 32

Exide Batteries of Canada, Limited, Toronto

"Exide" and "Manchex" *Reg. Trade-marks U.S. Pat. Off.*

1888...DEPENDABLE BATTERIES FOR 62 YEARS...1950

This page is reserved under the **MSA PLAN** *(Manufacturers Service Agreement)*